

Understanding Behavior Disorders: A Contemporary Behavioral Perspective

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A Behavioral Perspective on Adult Attachment Style, Intimacy, and Relationship Health

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Couples come to therapy in distress and seeking help for a variety of problems in their relationships. Most of the problems couples encounter cannot be classified in terms of DSM IV disorders. Instead, the symptoms of marital ill-health include chronic relationship distress, thoughts of divorce, frequent bitter arguing or withdrawal, and a sense of being either chronically at war with each other or completely emotionally numb. From the perspective of adult attachment theory, these problems can result from the complex interplay between individual partners' attachment histories and bids for nurturance and closeness within the current relationship that have gone awry.

Given that the purpose of the current volume is to explore contemporary behavioral perspectives on behavior disorders, this chapter will focus on disorders of attachment and intimacy in couple relationships. The goal of this chapter is to explore the potential contributions to attachment theory that might be derived from application of contemporary behavioral theory and research. Although early attachment researchers clearly understood and identified the key role played by a mother's responsiveness to a child's signals in the development of different attachment styles, we argue that these researchers did not take full advantage of behavioral theory and research to aid their understanding of attachment as a developmental phenomenon. Drawing principally on evolutionary-ethological and psychodynamic theories, and more recently on cognitive and cognitive-behavioral theories, attachment researchers have missed a potentially rich source of information about the shaping of behavior provided by decades of basic operant research.

A behavior analytic (BA) perspective on attachment focuses on the development of the person in the context of her learning history and the lawful development of attachment repertoires shaped by that learning history. In contrast, traditional attachment theory, while acknowledging individual history, focuses on internal mechanisms as causal agents (i.e., cognitive maps and working models). We will not wage the standard partisan battle here between contextualists and mechanists, because in the case of the attachment literature, that debate is unlikely to be fruitful.

Rather than oppose traditional theory, we would like to suggest that because of BA's solid foundation in empirically observed behavioral phenomena, it can function to provide a much more active dialogue with the data provided by Harlow, Bowlby, Ainsworth, Main, and other attachment scientists. The potential outcome of such a dialogue is a fresh perspective on attachment and new testable hypotheses.

In this chapter, we will explore how a behavioral perspective can foster a rich understanding of adult attachment styles and how such styles can contribute to distress between partners. We review the literature on attachment relationships and then spell out how a behavioral perspective can provide a compelling framework for understanding how attachment styles develop as well as how they influence adult relationships. We then apply a behavioral perspective to understand how patterns of vulnerability and intimacy in couples emerge and how some such patterns become problematic for couples. Finally, we will offer an account of how Integrative Behavioral Couples Therapy (IBCT) can be used to help couples move beyond the difficulties they experience.

Origins and Background of Attachment Theory

John Bowlby laid the foundation of attachment theory with his three volume tome, *Attachment and Loss* (1969, 1973, 1980). Influenced by the evolutionary biologist Konrad Lorenz and by Harlow's work with rhesus macaque monkeys (e.g., Harlow, 1958), Bowlby rejected the idea that attachment was a product of drive reduction. More specifically, he rejected the idea that attachment between mother and child developed because mothers meet their infants' need (drive) for food. Harlow (1958) was instrumental in refuting the drive-reduction theory of attachment. In experiments with macaque monkeys, he found that monkeys spent more time with a warm, soft dummy-mother that did not provide food than with a wire cage dummy-mother that provided food. This finding validated Bowlby's sense that attachment relationships were more complex than drive-reduction theory allowed. With this information in tow, Bowlby proceeded to develop the argument that attachment relationships have survival value because they keep infants close to caregivers who can provide protection in the face of danger (Bowlby, 1969, 1973, 1980, 1988). Thus, he came close to offering a functional analytic explanation of attachment in which the function of attachment eliciting behavior (e.g., crying, bids for physical closeness) is ultimately the protection of infants. Had he embraced this position more fully, the field might not have taken the psychoanalytic turn that now characterizes it. However, Bowlby had strong philosophical commitments to the psychoanalytic paradigm and eschewed the idea that attachment theory was a version of behaviorism (Bowlby, 1988). As a result, the operant underpinnings of attachment theory were minimized and attachment became a subfield within psychodynamic theory. Within this subfield, many researchers have made valuable contributions.

Mary Ainsworth and her colleagues (Ainsworth, Blehar, Waters, & Wall, 1978) expanded on Bowlby's work through intensive observational studies of mothers and

infants in Uganda and the United States. Through these observations, particularly those conducted in the United States, Ainsworth developed the laboratory based "strange situation" procedure, which she used to characterize styles of attachment relationships. In the "strange situation," researchers observe the caregiver and child in several different scenarios: with the caregiver and the child alone in an observation room together, next with a stranger in the room with them, then with the baby alone with the stranger and then briefly reunited with the caregiver, and finally, with the child alone in the room. After each shift, researchers noted how the infant responded and whether he or she was distressed or apathetic. They also noted how easily the infant was soothed by his or her caregiver.

Ainsworth and colleagues (1978) used their extensive observations of infant-mother interactions, both in naturalistic settings and in the "strange situation," to develop a three-tiered classification system of attachment styles. They termed the three types of attachment relationship A, B, and C styles, each of which will be described in turn.

Style A, sometimes referred to as an avoidant attachment style, is characterized by infants who show practically no response to being alone in the "strange situation" (Ainsworth et al., 1978). When the caregiver leaves the room, the infant does not appear distressed, and when the caregiver returns, the infant does not greet or approach him or her. Similarly, when the stranger enters, infants with avoidant attachment styles either ignore him or her or are *more* friendly toward the stranger than toward the caregiver. Furthermore, Ainsworth et al. noted that infant avoidance is linked to caregiver behavior: Infants who display avoidant behavior tend to have caregivers who either directly reject attachment behavior (i.e., ignore bids for physical closeness, ignore infants' greetings, etc.) or report resentment at having to care for the infant.

Attachment style B, often termed the "secure" attachment style, is characterized by infants who show distress at being separated from their caregivers, who greet or approach caretakers after their return from separation, and who are easily comforted by caregivers when distressed by the separation (Ainsworth et al., 1978). As with the avoidant attachment style, Ainsworth et al. noted that caregiver behavior is linked to the secure attachment style. Indeed, caregivers of securely attached infants are likely to respond quickly and appropriately to their infant's needs and to be comforting to the infant when the infant is in distress.

Finally, attachment style C, also known as the resistant/ambivalent attachment style, is characterized by infants who appear to *both* seek *and* resist contact with the caregiver after reunions in the "strange situation." In addition, style C infants are often uncomfortable and distressed in the "strange situation" from the beginning, even before any separation from the caretaker has occurred (Ainsworth et al., 1978). When the caregiver leaves the room, the "resistant/ambivalent" infant tends to become very distressed, and when the caregiver attempts to soothe the infant, the infant usually continues to cry or fuss. Interestingly, Ainsworth et al. noted that this style of attachment is *not* related to maternal rejection, but rather to inconsistency

and insensitivity in the caregiver's ability to meet and respond to his or her infant's bids for closeness and comfort.

Mary Main and her colleagues (1985) posited that the attachment behaviors exhibited in the "strange situation" procedure become internalized as "working models of attachment." According to Main's theory, these representations of what a person expects from relationships are unconscious but modulate a person's expectations about the feelings, thoughts, and experiences that surround interpersonal relationships (Main, Kaplan, & Cassidy, 1985). While Main and other attachment theorists (e.g., Ainsworth et al., 1978) concede that attachment styles can change when, for example, severe economic strain or emotional difficulty drastically limit the time and quality of attention a caregiver can provide, they contend that attachment styles tend to be stable over time.

To examine the stability of attachment styles, Main et al. (1985) examined children at ages one and six and administered the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985) to their caregivers. The AAI was designed to measure adults' internal working models of attachment and classifies adults into three attachment categories: secure-autonomous, dismissing, and preoccupied (George et al., 1985). Secure-autonomous adults tend to have securely attached children. They are able to speak articulately and objectively about their attachment figures. Equally important, whether their own caregivers were consistent or appropriate is irrelevant to whether an adult is classified as secure-autonomous; it is the ability to speak clearly and objectively, and in a way that values the importance of attachment figures, that matters. According to George and colleagues, adults classified as "dismissing" tend to have children classified as avoidant. Their narratives concerning their own attachment experiences tend to minimize the importance of attachment figures and to ignore negative events. Such narratives often have a very positive tone, but when probed, interviewees cannot explain what exactly was positive about their upbringing or attachment relationships. Over the course of their work, Main and colleagues (1985) argued that the attachment behavior of 12-month-old infants becomes codified into an "internal working model" of relationships, accounting for the large association between the attachment styles of children at 12 months and 6 years. They also found that adult working models of attachment are closely related to their children's working models of attachment.

In addition to her work on "internal working models" of relationships, Main made another major contribution to attachment theory: She explicated a fourth distinct style of attachment. First recognized by Ainsworth and Eichberg in 1991, the fourth style of attachment was known as style D, which Main referred to as "disorganized." According to Main (2000), disorganized infants tend to respond to reunions during the "strange situation" with contradictory and sometimes difficult to understand behaviors, such as staring blankly, closing the eyes, engaging in undirected or misdirected movements, freezing, or appearing apprehensive at the sight of the parent. Main found that disorganized infants are most at risk for developing lapses in the ability to reason, becoming aggressive or disruptive, and

for developing dissociative disorders (Main, 2000). In addition, she found that infants exhibiting a disorganized attachment style tended to have either witnessed an event in which the caregiver was frightened due to a traumatic event or to have been traumatized directly by the caregiver. Main used this information to expound on Bowlby's theory that attachment has survival value. She posed the question: What happens when the person an infant comes to in distress becomes "a source of alarm?" (Hesse & Main, 2000). As with Bowlby's evolutionary theory of attachment, there are hints of an operant understanding of attachment relationships in Main's work, a point to which we shall return later in this chapter.

Bartholomew and Horowitz (1991) contested the idea that attachment styles are categorical. They suggested that attachment is the product of an individual's positioning on two continua: the degree to which a person feels positively about oneself and the degree to which a person feels positively about other people. Feeling positive about oneself is much the same as the construct of self-esteem. Feeling positive about others refers to the degree to which an individual trusts or feels confident in the ability of others to support, nurture, care for, or otherwise be present in relationships. Bartholomew and Horowitz proposed four distinct styles of attachment corresponding to the four quadrants formed by their two orthogonal continua. The first, referred to as secure attachment, results from a positive sense of self and a positive sense of others in a relationship. The second style, called preoccupied, results from a negative sense of self and a positive sense of others and is similar to the AAI's preoccupied style. People with this style tend to devote a great deal of energy to thinking about their relationships. They tend to seek affirmation and acceptance from others and to vest their hopes for security and safety in attaining these things. The dismissing attachment style, which results from a positive view of oneself and a negative view of others in relationship, is similar to Main's dismissing style. People who exemplify this style of attachment tend to avoid closeness and intimacy. In addition, they tend not to value close relationships with others. Finally, Bartholomew and Horowitz suggested a fourth style, much like Main's (2000) disorganized style. They termed this fourth attachment style "fearful," and theorized that it results from a negative model of both self and others in relationships. They asserted that people with fearful attachment styles are highly dependent on affirmation and acceptance from others but that they avoid intimacy in order to avoid pain. Thus, they are in the difficult position of valuing and wanting closeness as well as avoiding it so as to protect themselves from rejection and pain.

Hazan and Shaver (1987) linked adult romantic relationships with attachment processes. Following Bowlby, they described romantic love as a biological process which functions to keep prospective and actual parents connected so that they will provide reliable nurturance and protection for their children. Hazan and Shaver found that insecurely attached adults reported more negative thoughts and experiences of love than their securely attached counterparts.

A Behavioral Conceptualization of Adult Attachment Relationships

Like Hazan and Shaver (1987), we contend that couple relationships are contexts for attachment processes and take this as a foundation for developing our own behavioral conceptualization of attachment and its function in couple relationships. We believe that a behavioral perspective offers a compelling theoretical base from which to conceptualize the existing empirical evidence and generate new, unique, and testable hypotheses. We have great respect for the scientists who have done, and continue to do, pioneering work in attachment, and we do not wish to challenge the quality of their work. Instead, it is our position that a behavioral perspective on attachment contributes to the field by highlighting the basic behavioral processes through which attachment processes develop and proceed through time. In addition, we believe that a behavioral perspective on attachment connects seemingly incompatible claims about attachment and allows for an enriched understanding of how attachment styles play out in romantic relationships. Finally, a behavioral perspective posits the potential existence of additional, and as yet unidentified, attachment styles.

As we discussed earlier, we believe that Bowlby's work on attachment contained underpinnings of an operant understanding of attachment. Bowlby described attachment behavior as an operant that functions to bring caregivers to the infant and thus protect the infant from danger. This view is compatible with a behavioral perspective, and we will develop it further by exploring how attachment behavior can be differentially reinforced to yield distinct attachment styles. We contend that each episode of attachment behavior begins with the same operant class: a bid for nurturance, closeness, or protection. In order to explore this idea, we will investigate how different consequences and various reinforcement schedules allow for the development of different attachment styles. It is important to note that although attachment patterns vary in a more continuous rather than categorical way, we are most interested in clearly identifiable patterns of behavior. We therefore acknowledge but do not get sidetracked by the fact that attachment behavior varies continuously and contextually.

Extending Basic Principles of Behavior to Attachment Theory

The first step in extending basic principles of behavior to attachment theory is to identify the operant in question. In other words, what is the specific class of behavior involved in attachment events? Attachment often refers to "internal working models," presumably derived from histories of interactions with primary caretakers. Bowlby (1969, 1973, 1980) referred to those behaviors that functioned to provide proximity between the infant and the caregiver, thus providing protection and, presumably, nurturance such that the infant was more likely to survive to pass on his or her own genes. Although originally discussed as a "behavioral system" (consisting of the innate attachment-relevant behaviors of both infant and mother) based on Bowlby's ethological perspective, we will frame attachment behavior specifically as a behavioral class shaped by its operant function of obtaining

nurturance (broadly defined). From our perspective, Bowlby correctly asserted that the history of the species has shaped an inclination for infants (and adults) to seek attachment and for caregivers (including other adults) to respond by providing protection and nurturance. In addition, a BA perspective recognizes that the exact topography of the attachment repertoire is shaped by each individual's unique reinforcement history. It is this individual-level reinforcement history that we are most interested in for the current analysis.

Attachment Transactions

When we observe attachment transactions as they unfold in the natural environment or in the strange situation, what do attachment-seeking behaviors look like? Principally, they involve approaching or calling to the caretaker or partner for nurturance. We will equate attachment behavior with nurturance-seeking and define the class of behavior as comprised of a range of behaviors including bids for closeness, companionship, comfort, protection, caretaking, reassurance, and sustenance. Each of these emerges from a particular state of deprivation or threat but generally represents the inclination to seek protection and resource-sharing from others assumed to have evolved over the history of the species. In short, we are born inclined to seek out and attach ourselves to those who protect and nurture us. Bowlby, from his ethological perspective, focused more narrowly on the protection-seeking function of the attachment-seeking repertoire, because evolutionary theory stresses the survival of the individual in the service of reproductive success. We have broadened the emphasis somewhat to take into account the range of reinforcers that are most likely associated with the overarching protection goal. Just as feelings of hunger and the experience of flavor are associated with the overarching goal of eating to survive, feelings of closeness, comfort, reassurance, and desire for caretaking are associated with the overarching goal of acquiring protection.

Given nurturance-seeking, the key to exploring attachment transactions and the resulting attachment repertoires from a behavior analytic perspective lies in examining the variety of ways in which those bids for nurturance can be consequted or completed between partners. To put it simply, bids for nurturance can be (a) reinforced, (b) punished, or (c) ignored, and the different ratios of those three types of consequences, including variability in schedules of reinforcement, should determine the attachment repertoire that the person develops in relation to actual and potential attachment figures. Put another way, the manner in which an attachment figure tends to respond to bids for nurturance can be represented as a three-part ratio consisting of the probability that nurturance-seeking will be reinforced, punished, or ignored. Each bid for nurturance is a reach into a probability bag containing those three possible responses, with the expected odds of pulling any particular response depending entirely on that dyad's previous history of attachment transactions. The behavior that is shaped by that history constitutes the person's attachment repertoire. Depending on the historical mix of these three types of responses, the person will develop a repertoire in relation to others (potential

attachment figures) that should resemble previously described attachment categories, while at the same time highlighting the "spaces between" those categories. In the following sections, we will describe the various probability ratios formed by the three possible consequences of nurturance bids and the repertoires most likely to result from those ratios.

Ratios highest in reinforcement. Initially, it should be noted that nurturance-seeking as a category of behavior will vary in strength depending on conditions of deprivation and threat. In other words, people are not always strongly seeking nurturance from others. A person's need for nurturance will vary with the circumstances. A person is more likely to seek nurturance after a period of deprivation, separation, or threat than during times when that "need" has been satiated.

Histories in which bids for nurturance are reinforced more frequently than they are punished or ignored should result in a stable, well-defined, and secure attachment repertoire characterized by a tight association between deprivation, an available attachment figure, and confident nurturance-seeking. Evidence from the extensive attachment literature demonstrates that such secure attachment styles are the most commonly occurring. Ainsworth et al. (1978) noted that the mothers of more securely attached infants "tend to be substantially more sensitive, accepting, cooperative, and psychologically accessible to the babies" (p. 146). In addition, Ainsworth's studies found that the mothers of more securely attached children responded more promptly to their babies' cries, handled their babies more affectionately and tenderly, and responded to their babies' cues more contingently. In those circumstances in which reinforcement of nurturance-seeking is substantially more probable than either punishment or ignoring, nurturance-seeking under the appropriate conditions of deprivation or threat, and in the presence of an appropriate discriminative stimulus (i.e., attachment figure), should occur consistently and lawfully. In other words, a person will develop a strong repertoire of nurturance-seeking from identifiable attachment figures, and the person will reliably seek nurturance when he or she needs it. Histories rich in reinforcement for nurturance-seeking teach a person that attachment figures are responsive and can be counted on and that the world of close others is stable and reliable. From a behavior analytic perspective, a secure attachment style is a repertoire for nurturance-seeking that results from a reliable reinforcement history. More technically, such highly contingent responding by the mothers to their infants' bids for nurturance should result in strong stimulus control by the mother over the infant's nurturance-seeking behavior under conditions of deprivation. This relationally situated stimulus control constitutes the infant's attachment to her "attachment figure."

Although stimulus control under such circumstances is extremely strong, a related characteristic of rich reinforcement contingencies is that the resulting behavior tends to generalize rather well to similar circumstances. Accordingly, one would expect people raised with high degrees of responsiveness to nurturance bids to form positive attachment relationships with sufficiently similar others fairly

easily. In fact, results from some of Main's early work (as cited in Ainsworth et al., 1978) suggest that more secure babies are more positively sociable with relatively unfamiliar adults than babies categorized as more insecure. Additionally, the literature on adult attachment has consistently reported a robust association between secure attachment style and capacity to form close intimate relationships.

Although it is unlikely that any person has ever been raised in circumstances that provided reinforcement for nurturance-seeking on a strictly continuous reinforcement schedule, schedules rich in reinforcement are apparently the most probable. It is likely that all schedules of reinforcement for nurturance-seeking are essentially intermittent and vary in terms of the probability of reinforcement over punishment or ignoring. Some circumstances may nearly approximate a continuous reinforcement schedule, while others may be increasingly intermittent. Ainsworth et al. (1978) noted that among mothers of securely attached infants, there are mothers who respond very sensitively and consistently as well as mothers whom they describe as inconsistently sensitive, mixing in both periods of ignoring and interfering.

Like Bartholomew and Horowitz (1991), the BA perspective proposes that one result of variance in the probability of reinforcement is that attachment repertoires are continuous or dimensional rather than strictly categorical. For example, within the broad category of "securely attached," there should exist a continuum spanning the range from ratios that approximate continuous reinforcement schedules to those that mix in substantially higher probabilities of ignoring (but little or no punishment).

Theoretically, therefore, within the broad category of securely attached individuals, there should be some variability with regard to how well individuals tolerate periods in the relationship in which the partner is less responsive to attachment bids. The closer a reinforcement schedule is to continuous (the larger the ratio of reinforcement to ignoring), the more vulnerable is the resulting repertoire to extinction. The smaller the variable ratio is the more extinction-resistant it becomes. Thus, within the range of securely attached individuals, some will be more resistant to the extinction of their nurturance-seeking repertoires than others. For example, if a person has been raised by parents that respond very consistently every time she approaches them seeking nurturance and then as an adult she becomes involved with a partner that tends to ignore her bids for nurturance, she is likely to stop seeking nurturance from that partner fairly quickly (following perhaps a brief extinction burst). In other words, she will be unlikely to stay with someone that tends to ignore her attachment needs. On the other hand, if a person has been raised by parents who often provided nurturance on demand but also ignored those bids from time to time, that person would learn to tolerate some lack of responsiveness from an attachment partner. Thus, as an adult, that person would be more likely to tolerate the occasional lack of responsiveness from a partner without ceasing bids for attachment altogether.

BA theory predicts that some otherwise securely attached individuals should be fairly extinction-vulnerable and relatively more likely to leave a partner that does

not consistently respond to bids for nurturance, whereas other securely attached individuals should be much more tolerant of occasional or intermittent nonresponsiveness. Speculatively, the more extinction-resistant secure individuals may be those that are more capable of forming stable relationships with avoidantly attached partners, whereas the more extinction-vulnerable secure individuals may be much more selective of consistently bid-sensitive partners. Regardless, neither "type" of secure individual should be particularly prone to developing disordered relationships. In fact, in adult couples, the most frequent pairing is of two securely attached partners, and the next most common pairings are between one securely attached and one insecurely attached individual (Brennan & Shaver, 1995). This simple frequency, along with other evidence from the literature, suggests that not only are more securely attached individuals less susceptible to relationship dysfunction, but they may actually function as a stabilizing force in pairings with more insecurely attached individuals.

Ratios highest in reinforcement, but also high in ignoring. As implied by the continuum discussed above, ratios involving mostly reinforcement can theoretically include large amounts of ignoring, up to and beyond the point where the result is greater extinction-resistance within a primarily secure attachment style. At the point where ignoring begins to be almost as probable as reinforcement, the resulting repertoire should begin to look more and more relentless and clingy, with bids for nurturance becoming fairly constant and invariable. Such large variable ratio schedules tend to produce behavior that occurs at a very high rate with virtually no post-reinforcement pause. Thus, a person whose bids for nurturance resulted about equally in ignoring as reinforcement would be expected to develop a repertoire in which he would tend to make bids for nurturance at a fairly high rate and would be undeterred from making those bids, regardless of a partner's nonresponsiveness. In addition, even given a reinforcing response, the person would be likely to continue making bids for nurturance with little sign of a post-reinforcement pause. It is also likely that it would be difficult for that person to feel satiated for long by nurturing responses, given a history of reinforcement that taught him that nurturing is fairly unreliable. This style of persistent nurturance and reassurance seeking has been described in the attachment literature as a "preoccupied" attachment style characterized by preoccupation with the attachment partner, clinginess, and a pervasive sense of anxiety about the availability of continued nurturance (Main, 2000).

One expectable characteristic of a large variable ratio schedule, as noted above, is that it produces a very high rate of behavior with little post-reinforcement pause, thus leaving little time and energy for other behaviors. One of the central facets of Bowlby's (1969, 1973, 1980) attachment theory is that an infant must feel relatively assured of the responsiveness of an attachment figure before he or she will feel comfortable exploring and learning from the rest of the environment. Among infants and adults classified as securely attached, exploration of the environment occurs regularly and consistently. Such individuals have learned that their attachment partners will respond with contingent nurturing if and when needed, and therefore

they can turn their behavior to other priorities. However, for individuals such as those described here, for whom the history of reinforcement for nurturance-seeking has been very inconsistent, so much time and energy becomes devoted to seeking reassurance and nurturance (with little post-reinforcement pause), that little time and energy remains for engaging effectively with the rest of the environment. As a result, the focus of attachment behavior narrows to only one time-consuming relationship. In addition to being potentially relationally dysfunctional, this type of repertoire is also likely to be depressogenic (Scott & Cordova, 2002). Narrow and rigid repertoires have been argued to create a particular vulnerability to developing depression specifically because they provide few, and easily disrupted, opportunities for engaging in effective behavior (Cordova & Gee, 2001). In terms of relationship dysfunction, the preoccupation and clinginess that characterize a preoccupied style can generate a great deal of stress within a relationship because it feeds demand-withdrawal patterns between partners, emphasizes differences in needs for closeness versus distance, and generally contributes to an underlying chronic sense of dissatisfaction with the amount of nurturing provided by the partner. Preliminary evidence does suggest, however, that these repertoires can be modified so that more preoccupied adults can form more securely attached relationships with adult partners (Scott, 2002). At the same time, repertoires are built, not replaced, and so it is likely that in the absence of opportunities to build new repertoires, such individuals will maintain an enduring vulnerability predisposing them to preoccupied behavior.

The general principle at work in building such "preoccupied" repertoires is that the higher the proportion of nonresponsive to reinforcing responses, the greater the tolerance or extinction resistance the person develops to being ignored by an attachment figure. On the secure end of the spectrum, this presents few problems and may actually confer some strength to the secure attachment style by making it more resilient to periods of neglect that may characterize difficult periods in an adult long-term relationship. The transition to parenthood, with its associated decrease in time available for nurturing the parents' relationship, is one such example. On the preoccupied end of the spectrum, increased extinction-resistance also comes with an anxiety-driven persistence or clinginess that is chronically uncomfortable for the person experiencing it and difficult to tolerate for the partner.

Ratios highest in reinforcement, but also high in punishment. Following from the same general principle discussed above, if a person's bids for nurturance are sometimes reinforced and sometimes punished, that person will learn to tolerate punishment to get his nurturance needs met. The punitiveness involved need not necessarily be abusive, but can, and most likely often does, include noxious interactions with a caregiver around occasions of nurturance. For example, Ainsworth and colleagues (1978) describe mothers of ambivalent infants as sometimes engaging in inappropriately controlling behavior and, for example, "resist[ing] any effort the baby made to feed himself. The babies who were treated thus tended to rebel, so that feedings were unhappy and occasions for struggle" (p. 146). In this example, nurturance and

punitiveness are occurring simultaneously in response to the child's bid to be shown care. The affective side effect should be anxiety about punishment or reciprocated anger. Thus, if a person cannot predict whether a bid for nurturance will result in being nurtured or punished, then simply needing nurturance should elicit anxiety and fear, and approaching the attachment figure should intensify that feeling. In addition, the three standard responses to applied punishers are (a) aggression, (b) escape, and (c) avoidance. So, theoretically, given a need to be nurtured and the presence of an attachment figure, the person should feel (a) fear, (b) anger, (c) a desire to approach, and (d) a desire to run away. That exact mix of motivations has been observed by Ainsworth and others in children they have classified as "anxious-ambivalent." From the BA perspective, anxious-ambivalent attachment styles should result directly from histories in which bids for nurturance are almost equally likely to be met with punishment as reinforcement. As we will discuss later, as more and more punishers are added, the repertoire should move from looking like anxious-avoidance to looking like what has been described as a "disorganized" attachment style.

The BA perspective suggests that current attachment theory may merge two potentially quite different attachment styles, preoccupied and ambivalent, into the one category of "anxious-ambivalent." At the same time, it should also be noted that early attachment researchers, including Ainsworth, made distinctions between several subgroups within each of the original three attachment styles and recognized that there was lawful variability that remained to be discerned and studied. A BA analysis suggests that if reinforcement is most probable, even if only slightly more probable than other responses, the individual will learn to tolerate whatever else is in the mix, regardless of whether the rest of that mix consists mostly of being ignored or of being punished. If having nurturance bids ignored is a significant probability and punishment is not, then the person should develop an attachment style that looks preoccupied and anxiously persistent. If punishment is a significant probability (again with reinforcement being most probable), then the person should develop an attachment style that looks anxious and genuinely ambivalent. Thus, a genuine distinction should exist between a "preoccupied" attachment style and an "anxious-ambivalent" attachment style, two styles that are potentially confounded in current attachment theory. The difference should be the source of the experienced anxiety. One might expect anxiously-ambivalent individuals to report an approach-avoidance conflict about attachment figures and preoccupied individuals to report a more simple sense of yearning for attachment figures. In other words, the anxiously-ambivalent should genuinely experience and be able to report the ambivalence about attachment figures that the category term has always implied, whereas preoccupied individuals should experience a much less ambivalent craving for nurturance from others. In addition, because of that strong sense of ambivalence about others, anxiously-ambivalent individuals may report that they only genuinely feel at ease when alone, whereas preoccupied individuals may report that they easily "lose themselves" in relationships. A sense of only being genuinely comfortable

when alone may also characterize fearfully-avoidant individuals due to the punitive nature of their history with attachment figures, as we will discuss later.

Another important characteristic of punishment, repeatedly demonstrated in the basic BA literature, is that punishment suppresses behavior without extinguishing it. Put another way, the individual remains just as motivated to seek nurturance but suppresses the behavior associated with that need in order to avoid punishment. The implication is that the experienced desire for nurturance remains strong in anxious-ambivalent individuals and the behavior, bids for nurturance, is likely to rebound strongly at any signal that reinforcement (nurturance) might be available. This would account for the high degree of vigilance in anxious-ambivalent individuals, as well as for their potentially high tolerance for the punishment of nurturance bids.

An additional principle that has been derived from the work of behavior analysts regarding punishment is that punishment does not generalize well. Indeed, punishment tends to be rather tightly associated with the specific source of the punishment and the punished behavior quickly reemerges when the source of the punishment changes or is removed. Extending that principle to attachment theory suggests that individuals whose bids for nurturance are frequently punished are likely to associate punishment with the specific person who has applied punishment and with the specific circumstances under which punishment occurred. If a new person enters the scene, then nurturance-seeking behavior should quickly reemerge to the extent that the new person is perceptibly different from the punishing person. Ainsworth et al. (1978) noted that the avoidant infants in their sample were quite willing to respond positively to the close bodily contact of the visitor-observer in the strange situation, despite the fact that those same infants generally avoided contact with their own mothers. One may also see this phenomenon in the particularly passionate relationships formed by individuals with abusive histories. In addition, even given the same punishing partner, if the circumstances surrounding punishment for nurturance-seeking change, then nurturance-seeking should again quickly reemerge, depending on how different the circumstances are and whether or not those specific circumstances have been previously associated with punishment.

Ratios highest in punishment. In those circumstances where a child's caretakers are frequently punitive or abusive, bids for nurturance are more likely to result in punishment than either nurturance or neglect. Ainsworth et al. (1978) noted that, "a highly rejecting mother frequently feels angry and resentful toward her baby. She may grumble that he interferes unduly with her life, or she may show her rejection by constantly opposing his wishes or by a generally pervasive mood of scolding or irritation" (p. 142). Ainsworth's studies also showed that these mothers demonstrated a strong aversion to physical contact with their babies, despite the fact that they tended to hold their babies as much as other mothers (usually toward instrumental ends determined by the mother). Ainsworth et al. (1978) noted that such mothers "provide their babies with unpleasant, even painful experiences

associated with close bodily contact" (p. 151). Under such circumstances, according to basic behavioral principles, the individual will learn to avoid, escape from, and/or aggress against those punishers, resulting in either fearful or aggressive attachment styles.

On the one hand, an individual may develop a "fearful-avoidant" attachment repertoire, such as that described by Bartholomew and Horowitz (1991), characterized by fearful avoidance of others, along with a chronic desire for nurturance. On the other hand, an individual may develop what might be called an "aggressive" attachment repertoire, characterized by defensively aggressive nurturance-seeking. Such a person might act out their nurturance needs by being domineering, possessive, threatening, and generally abusive in response to the assumed aversiveness of attachment transactions. In other words, because someone who has developed an aggressive attachment repertoire has learned that attachment figures are usually punitive, and because punishment does not extinguish nurturance-seeking, he or she may react to needing nurturance by lashing out in response to expected or perceived threat from available attachment figures.

If punishment is the most probable contingency, but the probability of reinforcement is also relatively high, then the resulting repertoire may be akin to that described by Hesse and Main (2000) as "disorganized," or one in which the individual, in response to the need for nurturance, becomes stuck in an approach-avoidance response. Ainsworth et al. (1978) noted that even the most rejecting mothers in their studies at least occasionally interacted with their babies in tender and affectionate ways, providing their babies with a history of nurturance mixed with both punishers and reinforcers. Under circumstances in which an individual does not know whether a bid for nurturance is going to be punished or reinforced, the resulting behavior is likely to be a confusing mix of approach, avoidance, and aggression. The availability of periodic nurturance should maintain nurturance-seeking by the individual, but since punishment is more likely than reinforcement, that nurturance-seeking should come with a great deal of fear and anger. In addition, the individual would learn that punishment has to be tolerated in order to receive any nurturance at all. The person genuinely becomes attached to her punitive caretaker, and expectations for what nurturing relationships should look like may generalize into adult relationships, setting the stage for the person to tolerate abusive relationships. Ainsworth et al. noted that "most family-reared infants do become attached, even to unresponsive or punitive mother figures" (p. 18).

Punishers can vary in intensity and severity. When we refer to punishers as contingent responses to bids for nurturance, we do not usually make reference to the severity of those punishers. The technical definition of punisher is that it is a contingent response that decreases the probability of subsequent occurrences of the target behavior. More informally, we generally think of punishers as noxious events contingent upon a particular behavior. For the most part, in the context of naturally occurring responses to bids for nurturance, the punishers that most people encounter are likely to be mild, including signs of irritation, frustration, anger, and rejection.

In other words, punitive responses do not have to be abusive in order for them to serve their function as punishers in shaping an individual's attachment repertoire. At the same time, punishers do vary in intensity from mild to severely abusive. Currently, the effects of that variability in severity on the formation of attachment repertoires are unclear. However, it is assumed that more noxious punishers result in greater aversion.

Ratios highest in ignoring or noncontingent responding. Ignoring leads to extinction of attachment seeking. Thus, high probabilities of ignoring place nurturance-seeking on an extinction schedule, theoretically resulting in the actual removal of nurturance-seeking from the repertoire. Perhaps the most dramatic circumstances in which ignoring is the most likely response to bids for nurturance is in orphanage institutions. As noted by Ainsworth et al. (1978):

...an infant reared for a long period... in an institutional environment in which he has so little consistent interaction with any one potential attachment figure that he fails to form an attachment may, when subsequently fostered and thus given an opportunity to attach himself, be unable to attach himself to anyone (p. 9).

However, given that the inclination to seek nurturance is fundamental to the species, extinction or near-extinction schedules are unlikely to remove nurturance-seeking from the repertoire altogether. Rather, they are likely to drastically weaken nurturance-seeking. More commonly, ignoring occurs within normal family settings characterized by unresponsiveness. Ainsworth et al. (1978) noted that "the inaccessible or ignoring mother is often so preoccupied with her own thoughts and activities that she does not even notice her baby, let alone acknowledge his signals" (p. 143). The resulting attachment repertoire should be akin to the "dismissive avoidant" style described by Bartholomew and Horowitz (1991), characterized by a virtual absence of nurturance-seeking, but by little, if any, anxiety about others. The person learns that other people do not provide nurturance and therefore does not seek it from them. This likely creates a self-fulfilling prophecy that follows individuals into adult life, providing them with little opportunity to receive nurturance from their social network. Again, this style should exist on a continuum, with higher levels of ignoring resulting in greater dismissiveness.

Even though a rigid extinction schedule should remove nurturance-seeking from an individual's repertoire, it will not destroy nurturance as a powerful reinforcer. In fact, one would expect such individuals to exist in a constant state of nurturance deprivation that may not only be palpable but chronically aversive and distracting. In the same way that certain circumstances extinguish an individual's efforts to find food without extinguishing the basic survival value of food or "hunger," other circumstances can extinguish an individual's efforts to find nurturance without changing the survival value of nurturance-seeking.

Ainsworth et al. (1978) described some ignoring mothers as not ignoring bids for nurturance, but instead as providing nurturance according to the mother's schedule and terms, rather than in response to the baby's signals (noncontingent

nurturing). Under such circumstances, one would expect the child's nurturance bids to extinguish (since they are not contingently responded to) and for the child to either develop a passive nurturance-seeking repertoire, or a superstitious nurturance-seeking repertoire, given that noncontingent reinforcement has been shown to shape superstitious behavior. Ainsworth et al. noted that "because the C2 infant [a subcategory of ambivalently attached] could rarely experience a consequence contingent on his own behavior, it is not surprising that he behaved very passively both in the strange situation and at home" (p. 237).

Although the effects of noncontingent responding should be similar to simple nonresponding, there are relatively few naturally occurring cases in which attachment figures are genuinely nonresponding in a neglectful and abusive sense. Instead, the type of attachment relationships observed to give rise to ambivalent attachment styles were not necessarily neglectful (the mothers did provide adequate care for their children) but provided care only on the caretaker's terms and schedule and not in response to bids from the child. Under such circumstances, a person learns that how and when they are provided nurturance is out of their control, resulting in the extinction of a great deal of the nurturance-seeking repertoire and a generally passive relationship to attachment figures. One might imagine such individuals passively falling into adult attachment relationships (because they have been sources of noncontingent nurturance in the past), but subsequently providing attachment partners with few, if any, cues about their own attachment needs, passively expecting to be nurtured without knowing how to ask for it. This repertoire would likely manifest itself not as active avoidance of close adult relationships, but as a passive nonpursuit of intimacy accompanied by a normal desire to be nurtured.

An analysis from a BA perspective comes to the same general conclusion as that argued by Bartholomew and Horowitz (1991) regarding avoidant attachment styles: that the original category of avoidant attachment (or style A children) described by Ainsworth and colleagues likely includes children shaped by two distinguishable histories, one in which frequent punishment suppresses approach behavior (fearful avoidance in Bartholomew and Horowitz's terms) and one in which frequent ignoring essentially extinguishes approach behavior (dismissive avoidance). In addition, an adult style that may look insecure, much like an avoidant attachment style, may actually be characterized by a learned, passive nonpursuit of attachment relationships that are actively desired, rather than by either fear of potential attachment figures or a conviction that others are not nurturing (quite the opposite, in fact).

Summary of Attachment Repertoires

In sum, an examination of attachment phenomenon from a contemporary behavioral perspective suggests a variety of possible attachment repertoires developing out of histories in which bids for nurturance are responded to with combinations of contingent reinforcement, punishment, ignoring, and noncontingent responding. See Table 14.1 for a summary of ratios of reinforcement and the resultant attachment styles.

Ratio of Reinforcement to Ignoring to Punishment	Resulting attachment repertoire/style	Description	Likely behavior in couple relationship
High reinforcement Low ignoring Low punishment	Secure, extinction vulnerable	Individuals with this attachment repertoire tend to have secure relationships with close others. They tend to trust attachment figures and to have faith in them. They also tend to have children who are more likely to be secure in their attachment relationships.	Generally form positive attachment relationships and have healthy relationships. The closer the caregiver was to continuous, the less tolerant of ignoring responses these individuals will be in couple relationships. Thus, individuals with this style tend to have little tolerance for partners who are inattentive, and are likely to stop seeking nurturance/closeness or even to end relationships that are not adequately responsive.
High reinforcement Moderate ignoring Low punishment	Secure, extinction resistant	Same as above.	Generally form healthy relationships as adults. These individuals tend to be more tolerant of periods of inattention from their partners and thus tend to cope well with relationships in which their bids for closeness/nurturance are usually met but sometimes ignored.
High reinforcement High ignoring Low punishment	Preoccupied	Preoccupied style characterized by a high rate of bids for nurturance with little post-reinforcement pause between bids. Tend to yearn for attention from caregivers.	Potentially dysfunctional and depressive because almost all of a person's energy is focused on maintaining a secure connection, at the expense of devoting energy to other relationships or activities. Individuals tend to be jealous, fearful, and clingy. Demand-withdraw patterns may be common.
High reinforcement Low ignoring High punishment	Anxious-Ambivalent	Anxious-ambivalent style in which person may feel fear, anger, and a desire to run away from potential providers of nurturance due to a history of receiving both punishment and reinforcement for nurturance-seeking. Because of the mixed reinforcement and punishment history, people may report feeling at ease only when alone.	Approach-avoidance patterns are common. Nurturance-seeking behavior has been partially suppressed but is likely to re-emerge strongly given reinforcement. Vigilant monitoring of partner's behavior is common. Short-term passionate relationships occur frequently, but tend to end early due to fearful or angry responses to interpersonal hurt.
Low reinforcement High ignoring Low punishment	Avoidant-Dismissive	This style is characterized by a virtual absence of nurturance seeking. The individual has learned that bids for nurturance are almost never met, and therefore nurturance-seeking behavior is practically extinct.	Individuals have learned that other people do not provide nurturance and therefore they do not seek it out. This can lead to a self-fulfilling prophecy in which individuals do not expect nurturing and therefore do not try to attain it. As a result, such individuals are often not in couple relationships as adults, and may be lonely.

Table 14.1. Description of Attachment Styles.

Ratio of Reinforcement to Ignoring to Punishment	Resulting attachment repertoire/style	Description	Likely behavior in couple relationship
Low to moderate reinforcement (non-contingent) High ignoring Low punishment	Avoidant-Passive	Individuals with this reinforcement history may be interested in intimacy but often have no practical repertoire for pursuing it. Their attachment figures tended to respond non-contingently to their bids for nurturance, so they have little experience seeking out nurturance but do expect others to provide it.	As adults, these individuals may be lonely because they yearn for closeness, but do not know how to pursue it. These individuals may also be in relationships where they passively expect nurturance but in which they are relatively poor nurturers.
Low reinforcement Moderate ignoring High punishment	Fearful-Avoidant	This style appears generally avoidant of attachment relationships. Bids for nurturance were most often either ignored or punished, and as a result, individuals learn to avoid close others in order to minimize the threat they pose.	Tend to have great difficulty forming and maintaining close couple relationships. They sometimes move quickly from relationship to relationship in pursuit of nurturing but leave quickly in order to avoid pain. Nurturance-seeking has been suppressed and is likely to rebound strongly when reinforced. However, as the relationship becomes more emotionally threatening, the person is likely to re-suppress nurturance-seeking, creating a situation in which the person may withdraw from the relationship suddenly.
Moderate reinforcement Low ignoring High punishment	Fearful-Disorganized	Bids for nurturance are occasionally reinforced, but often punished. The availability of periodic reinforcement maintains nurturance seeking but involves fear. The resulting behavioral repertoire includes approach, avoidance, and aggression.	Individuals with this history tend to experience the prospect of nurturance as both noxious and appealing. Nurturance-seeking behavior comes with a great deal of fear and anger, which often results in a powerful approach-avoidance pattern. Individuals may tolerate abusive treatment in adult couple relationships and may also be abusive in relationships.
Low reinforcement Low ignoring High punishment	Fearful-Aggressive	People with this history of reinforcement have learned to associate seeking nurturance with punishment. They therefore often relate to close others in an aggressive fashion.	Tend to form abusive relationships in which they behave aggressively and are treated aggressively. Since these individuals have not learned to associate nurturance-seeking with reinforcement, they tend to lack a repertoire of nurturing behavior.

Table 14.1. *cont'd* Description of Attachment Styles.

Mostly secure attachment repertoires should theoretically vary in terms of their extinction resistances. Such variance should depend on the ratio of reinforcement versus ignoring responses to bids for nurturance, with greater probabilities of ignoring building greater extinction resistance. As noted earlier, mostly secure attachment repertoires have been shown to be associated with greater relationship health, and the distinction we draw here should theoretically have its impact on

stability of adult relationships during times of decreased responsiveness. For example, one might predict that more extinction-resistant secure repertoires would be more resilient during periods in which partners are forced to be apart (e.g., during military deployment). One might also expect people with more extinction-vulnerable repertoires to be more selective of mates, and therefore, to move quickly out of relationships that are not adequately responsive. In general, however, one would expect secure attachment repertoires to confer greater relationship health and stability.

What have traditionally been categorized as ambivalent attachment styles should, according to the current analysis, consist of two distinguishable repertoires. The first should be characterized primarily by a preoccupation with attachment-seeking and anxiety about abandonment, and the second should be characterized by fearful approach-avoidance. The first type of repertoire is theoretically shaped by histories consisting mostly of ignoring with some low-to-moderate probability of contingent reinforcement for nurturance-seeking. As adults, individuals with this type of repertoire should be clingy, fearful of abandonment, jealous, and in great need of reassurance. However, there is some preliminary evidence that these individuals can form more secure styles as adults if they find contingently nurturing partners (Scott, 2002).

The second, more genuinely ambivalent, type of repertoire is theoretically shaped by histories consisting of a somewhat equal mix of punishment and reinforcement for nurturance-seeking. As adults, individuals with this type of repertoire are constantly faced with an approach-avoidance dilemma in attachment relationships. On the one hand they want and seek nurturance and on the other hand, they are afraid of and therefore avoid closeness. Ultimately, fearfulness should limit intimacy within adult relationships, creating a chronic, if mild-to-moderate, sense of dissatisfaction and disconnection for both partners. Again, the repertoire will continue to be shaped by transactions with current attachment partners, either toward more secure or more insecure styles. Even among those shaped toward more attachment security, those with a history of ambivalent attachment should continue to have a unique vulnerability to developing approach-avoidance relationships.

From the current perspective, attachment styles traditionally categorized as three distinguishable fearful attachment styles. Dismissive attachment styles may include both genuinely dismissive repertoires resulting from the near-extinction of nurturance-seeking and passive attachment repertoires resulting from noncontingent nurturing. Within adults, the dismissive attachment repertoire should be characterized by a genuine disinterest in intimate relationships with little anxiety about other people. The passive attachment repertoire should be characterized by a genuine interest in and longing for intimacy but no effective repertoire for actively pursuing it. Both repertoires are likely to result in loneliness and difficulty finding and maintaining intimate relationships.

Fearful attachment styles may include three distinguishable repertoires. First, a genuinely fearful repertoire should result from histories consisting primarily of

punitive consequences for nurturance-seeking and should be characterized in adults as consistent fearful avoidance of intimate relationships accompanied by genuine longing for closeness. This type of fearful repertoire is the most likely to be sustained by negative reinforcement, since avoidance of feared others functions to eliminate a threat. Consequently, one might expect individuals with fearful-avoidant repertoires to have great difficulty forming and maintaining intimate relationships. One might also predict that individuals with fearful-avoidant repertoires might move quickly in and out of emotionally intense relationships, because suppressed nurturance-seeking is likely to rebound strongly when the person is made to feel safe. Similarly, nurturance-seeking is likely to resuppress as the relationship becomes more emotionally threatening, akin to the behavior of those with borderline personality disorder.

The next type of fearful repertoire is shaped by a history consisting of a mix of punishing and of reinforcing consequences, with punishing consequences being more probable than reinforcing ones. The resulting repertoire should be like an ambivalent attachment style in that it is characterized by an approach-avoidance conflict. In some cases, when the history consists primarily of punishment, the resulting behavior may look much more disorganized. In this case, the level of deprivation required to elicit an approach would have to be quite powerful to overcome a strong inclination to avoid a feared attachment figure. As adults, individuals with this type of history likely experience the desire for nurturance as both attractive and noxious, creating an approach-avoidance paradox much more powerful than that experienced by the ambivalently attached, resulting in emotional chaos. These individuals may be particularly susceptible to finding themselves in abusive relationships because they have learned to associate nurturance with punitiveness.

Finally, an aggressive attachment repertoire is also a likely outcome of histories consisting of large probabilities of punishment for nurturance-seeking. This may constitute a unique repertoire or it may be a facet of all attachment repertoires shaped by some mix of punitive consequences. Regardless, some individuals with histories of being punished regularly for seeking nurturance may develop repertoires in which they relate to potential intimates in a uniquely aggressive fashion. Having learned to associate nurturance with punitiveness, they may be particularly susceptible to forming abusive relationships. Whether an individual develops a disorganized style or an aggressive style may be culturally mediated.

Addressing Adult Attachment Insecurities in Couple Therapy

Although attachment histories cannot be erased, they can be shaped by the addition of new learning opportunities; for many people, stable responsive adult intimate relationships provide just the type of new learning experiences that can shape more secure attachment styles. At the same time, the enduring vulnerabilities created by insecure attachment repertoires are likely to manifest themselves in adult intimate relationships in fairly predictable forms.

Attachment Difficulties in Relationships

Insecure attachment interferes with the intimacy process through several routes. Histories of punishment for nurturance-seeking (fearful, disorganized, aggressive, and ambivalent attachment repertoires) make nurturance-seeking dramatically more interpersonally vulnerable than is the case for more securely attached individuals. As a result, fearfully and ambivalently attached individuals have more difficulty initiating intimate events because interpersonal vulnerability is substantially more threatening for them. In addition, the deepening of intimacy necessarily results in more frequent intimate hurts because intimate partners are more vulnerable to each other and more capable of being both intentionally and unintentionally hurtful (Cordova & Scott, 2001). As a result, maintaining close intimate connections requires an ability to tolerate occasional emotional hurt in non-relationship-destructive ways. However, these individuals are much more likely to respond to the inherent slings and arrows of intimacy with powerful urges to withdraw or counterattack. Thus, individuals with punitive attachment histories are not only less likely to initiate intimate events, they are also more likely to terminate the intimacy process.

Individuals with histories of having nurturance-seeking ignored or noncontingently responded to are substantially less likely to initiate intimate events because active nurturance-seeking has nearly been extinguished from their overall repertoire. The genuinely dismissive are not only less likely to initiate intimate events, but are also unlikely to reinforce the interpersonally vulnerable behavior of others and therefore are unlikely to culminate intimate events. Depending on how thoroughly nurturance and nurturance-seeking have been removed from the repertoire, the dismissively attached may either fail to form intimate relationships entirely or may form relationships that consist of very little intimacy. In contrast, the passively attached may be unlikely to initiate intimate events but may be more capable of culminating them simply by virtue of the fact that they are much more comfortable and desirous of intimacy in general. Although they may be prone to depriving their partners of sufficient nurturing, they themselves may be perfectly content as long as they have partners who are willing to actively pursue closeness with them.

Finally, the preoccupied and ambivalently attached, due to the clingy and hyper-vigilant nature of their attachment bids, are likely to overwhelm even the most securely attached partners at times with their need for reassurance. The preoccupied may be so focused on getting their own intimacy needs met that they themselves make poor intimate partners and their relatively extreme vulnerability to feeling abandoned may contribute to something of a self-fulfilling prophecy. Ambivalent partners, by contrast, may withdraw at the first sign of rejection or hurt, leaving their partners with the task of figuring out what went wrong and how to repair the relationship.

Dysfunctional Relationship Themes

Three common "themes" (Jacobson & Christensen, 1996) in distressed couples can be accounted for by attachment styles that interfere with the intimacy process.

For the purpose of this paper, intimacy refers to a process in couples' interactions in which behavior made interpersonally vulnerable by a history of punishment by others is elicited and reinforced by another person (technically, an intimate event; Cordova, 2002; Cordova & Scott, 2001). The classic example of interpersonally vulnerable behavior is the sharing of past hurts, humiliations, failures, and other painful emotional experiences. Additional examples include most of those behaviors that we refer to as "just being ourselves" which generally include behavior that we do not usually share with others because they are interpersonally risky (e.g., caressing, kissing, and holding, as well as burping, cussing, and acting cranky). Being reinforced for interpersonally vulnerable behavior increases the probability of whole classes of interpersonally vulnerable behavior in relation to that reinforcing person. The reinforcing person gains stimulus control over our interpersonally vulnerable behavior, thereby beginning to establish him or herself as an intimate partner. Most fundamentally, the process results in the development of a relationship in which we are, more often than not, safe "just being ourselves." Thus, intimate events are the building blocks of intimate partnerships that become characterized by open interpersonal vulnerability and feelings of safety, acceptance, and comfort. This occurs if the intimacy process unfolds well and is not derailed by other factors. Below, we describe three common relationship themes resulting from insecure attachment styles' effects on the intimacy process.

The closeness/distance theme. In the closeness/distance theme, one member of a couple typically wants more contact and closeness than the other member. This theme often arises out of differences between partners in their desires for closeness, with one partner wanting more closeness and the other wanting more distance. The closeness-seeking member of the couple often complains that the other partner does not spend enough time with him or does not want to spend time together in the same way. For example, a closeness-seeking partner might not consider watching television together to be "together time." She might long instead for more frequent conversation and physical touch. Closeness-seeking partners often complain that they do not feel fully appreciated or validated by their partners and that they typically have to be the one to initiate contact. Distance-seeking partners, by contrast, tend to feel overwhelmed by their closeness-seeking partners. They often report feeling as though no matter how much time they spend with their partners, it is never enough. Sadly, the closeness-seeking behavior of one partner often becomes the discriminative stimulus for the other partner's distancing, which in turn serves as the discriminative stimulus for the first partner's increased demand for closeness, creating a self-perpetuating dysfunctional pattern.

What might be going on here, and how might an understanding of attachment theory be helpful? One way closeness/distance patterns can originate is through the mismatch of attachment styles. An adult with a preoccupied attachment style has a learning history which has taught him or her that others' nurturance is unpredictable and that closeness needs will not always be met. Such individuals engage in high frequency bids for closeness with little post-reinforcement pause. Adults with ambivalent attachment styles are also likely to engage in a great deal of reassurance-

seeking driven by a chronic fear that their partner is angry. This pattern emerges from an attachment history in which punitiveness was common. For both of these types of styles, nurturance is not perfectly satiating because attachment figures signal both sources of nurturance and abandonment or rejection. The resulting clinginess and reassurance-seeking can overwhelm even securely attached partners, increasing the probability of falling into a closeness-distance pattern.

Chronically distancing partners, for their part, are likely to have avoidant attachment repertoires, characterized by dismissiveness or fear of closeness. Because their attachment histories have taught them that attachment figures are either generally nonresponsive or mostly punitive, maintaining closeness is either outside their repertoire or just plain scary. Individuals with avoidant repertoires often deprive even securely attached partners of optimal levels of closeness, thus these styles also increase the odds of setting in motion a closeness-distance pattern.

It should be noted that fearfully avoidant adults have had their nurturance-seeking behavior suppressed, not extinguished, and thus although closeness-seeking may be particularly scary for them, that repertoire may still be made available for shaping by a more reinforcing partnership. The genuinely dismissive, however, having had their nurturance-seeking repertoire extinguished (to varying degrees), may have the most difficulty forming intimate adult relationships without specific training in how to effectively seek and provide nurturance. The passively avoidant should fare relatively well with partners that actively pursue closeness with them because the passively attached genuinely want closeness and do not actively avoid it. They may, however, benefit from specific training in how to elicit and provide nurturance to their partners.

The parallel but separate lives pattern. Another common pattern evident in distressed couples is that of two people living separate lives in the same living quarters. Although the couple lives together, their lives do not appear otherwise intertwined; they may spend their leisure time separately, do household chores separately, and when home at the same time, are rarely to be found together. Such couples often state that they feel distant from each other or that they feel more like housemates than intimate partners. Working collaboratively as a couple is often a challenge for these couples, as their inclination is to divide up tasks and perform them individually, not as a couple.

From an attachment perspective, couples who find themselves in this pattern are likely to have learning histories that involve having had bids for closeness ignored or punished. As a result, when they perceive trouble in the relationship, they tend to withdraw and turn inward. Not surprisingly, people who have avoidant attachment styles are particularly susceptible to this relationship pattern. Once the pattern has been established, it often seems to gather momentum, and breaking out of it to seek contact or approach the other partner becomes less and less likely. When one or both partners have a history of having been punished for seeking closeness, the pattern is even more unlikely to be broken without professional help. Treatment for avoidance will be discussed at greater length later in this chapter, but the general approach to helping couples who experience the "parallel lives" pattern is to

decrease avoidance by increasing comfort with intimate interactions. This is usually accomplished through acceptance, which will be discussed later. It is also important to note that this pattern may emerge for nonattachment-related reasons. One common trigger for this theme is the transition to parenthood, when partners have less time and energy to devote to their relationship. It seems likely that securely attached couples are most likely to recover easily from such a situationally induced pattern, while more insecurely attached couples are likely to struggle with the pattern for longer periods of time.

The blaming or mutually aggressive pattern. Couples who are caught in a blaming pattern tend to have frequent arguments which quickly devolve into mutual blame, retribution seeking, grudge holding, and avoidance. Over time, even attempts at reconciliation or closeness may be met with a punitive response. Couples in which one or both members have learning histories that involve a history of receiving punishment when making bids for closeness may be especially prone to this pattern; this applies especially to those who rarely experienced reinforcing responses to their requests for closeness or comfort. As noted earlier, besides avoidance and escape, aggression is the most predictable response to contact with aversive stimuli. For fearfully and ambivalently attached individuals, attachment and closeness have acquired aversive qualities from histories of punitive responses to attachment bids. In addition, nurturance-seeking is particularly interpersonally vulnerable for such individuals, and any hint of rejection or punitiveness by an intimate partner is likely to be especially painful, again eliciting either aggression or withdrawal. In short, individuals with punitive attachment histories are particularly vulnerable to reactive aggressiveness and blaming in their adult intimate relationships and are particularly likely to fall into mutual blame and mutual aggressiveness with even securely attached partners. Unfortunately, anger and aggression can escalate when a person feels blamed, so this pattern has the potential to become dangerous. The pattern of trading punishment (blaming responses) either in response to aversive stimuli or in self-defense creates a cycle in which punishment becomes the most probable outcome of interaction. Since neither member of the couple is reinforced in most interactions, it is difficult for either member to provide reinforcing responses to the other.

An Approach to Couples Therapy

We believe that Integrative Behavioral Couples Therapy (IBCT) is uniquely suited for working with couples struggling with relationship dysfunction caused by insecure attachment styles. Developed by Jacobson and Christensen (1996), IBCT was designed for use with couples who had special difficulty in working collaboratively. Christensen and Jacobson (1991) found that traditional behavior therapy for couples did not work well for couples who were very polarized because, although they sometimes could follow the rules prescribed by the therapist for problem solving and communication, they stopped following the rules almost as soon as they left therapy. In some cases, couples were so polarized that even with the help of a therapist, they could not collaborate well enough to attempt new techniques of

communicating or solving problems together. For these particularly difficult couples, Christensen and Jacobson (1991) developed a new approach to therapy, designed especially for couples who have difficulty collaborating or moving beyond damaging patterns. The primary mechanism of change is, paradoxically, learning greater acceptance and developing deeper understanding of those aspects of the partnership that are unlikely to change. Although IBCT is a relatively new treatment, initial data suggest that it is more effective than traditional behavioral couples therapy in improving relationship satisfaction (Cordova, Jacobson, & Christensen, 1998; Jacobson, Christensen, Prince, Cordova, & Eldridge, 2000).

Using Acceptance Work in Therapy

Acceptance has been described with terms ranging from complete rejection of an event, through tolerance, to enthusiastic embracing (Cordova, 2001). Implicit in all definitions of acceptance, however, is the idea of giving up the struggle to change that which cannot be changed. Much like the oft repeated "serenity prayer" of Alcoholics Anonymous, the goal of acceptance work is to "accept the things (one) cannot change." As Christensen and Jacobson (2000) note, however, acceptance can be much more radical than simply tolerating that which one does not have the power to change. The ultimate form of interpersonal acceptance is empathy and compassion, the ability to notice one's partner's aversive behavior and to understand the lovable and sometimes even well-intentioned reasons behind it. As Christensen and Jacobson (2000) explain, "acceptance . . . is tolerating aversive behavior because you see that behavior as part of a larger context of who your partner is and who you are" (p. 124).

The goals of IBCT in relation to insecure attachment issues are compassionate acceptance and active coping. Given the assumption that insecure attachment styles remain enduring vulnerabilities within intimate relationships (Karney & Bradbury, 1995), even when secure attachment between partners is achieved, we believe that it is necessary for both partners to thoroughly understand the roots of insecure attachment styles and the understandable ways in which those styles are likely to manifest themselves in intimate relationships. The theory is that compassion for both the self and the partner, as well as a willingness to collaborate on coping with enduring vulnerabilities, emerges out of genuine understanding by and for each member of a partnership. Attachment insecurities are treated as faultless, naturally occurring "flaws in the fabric" of a couple's relationship from which both partners suffer and toward which both partners can orient as a team with mutual compassion and active coping. How does a therapist help a couple achieve acceptance? Cordova (2001) suggests three strategies for fostering acceptance: targeting the discriminative stimulus, targeting the aversion behavior, and targeting the consequences of aversion.

Targeting the discriminative stimulus. Targeting the discriminative stimulus involves shifting the stimulus value of an initially aversive stimulus from aversive to more appetitive. For example, the avoidantly attached individual's inclination to avoid intimacy is often quite aversive and blameworthy to his partner when the

couple first enters therapy. One approach to facilitating greater acceptance of that inclination is to help both partners more thoroughly understand the attachment history that shaped avoidance and the underlying fearful vulnerability that characterizes it. The goal, following from relational frame theory (e.g., Hayes, Barnes-Holmes, & Roche, 2001), is to shift the stimulus value of withdrawal from the aversiveness associated with descriptors like "cold" and "distancing" to the more compassion eliciting stimulus value of "scared" and "vulnerable." A successful shift in the stimulus value along this gradient should result in both partners actually experiencing the first partner's struggle with avoidance as more tolerable, understandable, and approachable, thus facilitating the intimacy process for both of them. The therapeutic process involves the repeated sharing of these more compassion eliciting reasons, which allows for the gradual shifting of stimulus value.

Targeting the aversion behavior. Targeting the aversion behavior means directly addressing how a partner responds to an aversive stimulus, most often his or her partner's behavior. Aversion usually takes the form of avoidance (e.g., withdrawing from an argument), so the therapeutic goal is most often to promote exposure and response prevention. The goal in targeting aversion behaviors is to change the stimulus value of the discriminative stimulus from aversive to more tolerable by facilitating experiences that undermine negatively reinforced avoidance and reinforce actively making contact. As with exposure and response prevention in the treatment of germ phobia, exposure to the aversive stimulus (e.g., dirt) in the absence of any harm should ultimately extinguish the avoidance response. In addition, if making contact with naturally occurring consequences is actually reinforcing (e.g., experiencing greater intimate safety), then not only is avoidance extinguished but an approach repertoire is established. As Cordova (2001) noted, the topography of the stimulus does not change, but its stimulus value does. Put another way, the aversive event that triggers avoidance does not change. Instead, the avoidant behavior is made to change, and through the resulting exposure, the stimulus value shifts from aversive to appetitive.

For example, for fearfully attached individuals, making bids for nurturance is scary and is therefore avoided. Greater acceptance can be facilitated by (a) facilitating a climate of compassionate understanding in therapy, and (b) encouraging the making of bids for nurturance and facilitating the partner's reinforcing response to those bids both in therapy and at home. The ultimate goal is for the naturally occurring contingencies to take hold and begin the process of shaping a more effective attachment repertoire. As Cordova (2001) noted, such exposure and response strategies rely on the fact that no harm comes from engaging in them. In a situation in which abuse or harm is possible, such techniques should not be used.

Targeting the consequences of aversion. The third way to promote acceptance in couples is through targeting the consequences of aversion. This means drawing attention to the negative consequences of aversion behavior while reinforcing efforts to approach and maintain contact. Borrowed from Functional Analytic Psychotherapy (FAP; Kohlenberg & Tsai, 1991), the goal of this strategy is to help shift the contingencies of reinforcement away from an automatic avoidance response and

toward a more intimacy-producing response. Whereas targeting aversion behavior relies on exposure, targeting the consequences relies on reinforcing a new, more intimacy facilitative repertoire. For example, in the above scenario with the fearfully avoidant partner, new, naturally occurring approaches for nurturance are likely to be weak and difficult to discern, but the therapist and both partners can be taught to be vigilant for any behavior approximating interpersonal vulnerability and to increase the amplitude of naturally occurring reinforcing responses (e.g., "when you told me how you felt about that, it made me feel closer to you."). As those initially tentative attempts at intimate approach are naturally reinforced, the stimulus value of bids for closeness should shift from mostly fearful toward greater intimate safety.

Conclusion

In this chapter, we have reviewed the literature on attachment theory and have suggested that a behavioral analytic perspective provides a generative theoretical framework from which to understand and approach this body of research. We have used BA to explain the function of attachment behavior and to account for the variability in attachment "styles." Our account reframes attachment styles as repertoires that have been shaped by individual histories composed of different ratios of reinforcement, ignoring, and punishment in response to bids for nurturance. By extension, attachment repertoires are evoked in the context of adult intimate relating. Many common relationship distress patterns can be understood as originating from attachment repertoires that are not conducive to intimacy. Indeed, insecure adult attachment styles can contribute to common painful relationship patterns, and IBCT can be useful in helping such couples to create new, more rewarding patterns with each other. By helping couples to gain a deeper understanding about what has shaped their behavior in close relationships (histories of punishment, being ignored, etc.), couples therapists can help partners come to a deeper understanding of themselves and their partners. Such an understanding, called "acceptance," leads to intimacy-conducive behaviors and can both reduce relationship distress and improve relationship satisfaction. We hope that our interpretation of attachment repertoires will lead the field to reconsider how attachment styles have traditionally been understood and to undertake new research based on these new interpretations. In addition, we hope that our reconceptualization of attachment will help guide clinical formulations and interventions, both in research and in practice.

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Chapter 15

Implications of Verbal Processes for Childhood Disorders: Tourette's Disorder, Attention Deficit Hyperactivity Disorder, and Autism

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Direct contingency principles have, for understandable historical and pragmatic reasons, dominated in the analysis of childhood problems from a behavioral perspective, and cognitive or verbal processes have often been ignored. New generations of behavioral concepts that are linked to verbal processes are receiving more attention in the field, particularly Relational Frame Theory (RFT; Hayes, Barnes-Holmes, & Roche, 2001). This chapter examines some of the implications of verbal processes for contemporary behavioral models of childhood behavior problems, specifically Tourette's Disorder (TD), Attention Deficit Hyperactivity Disorder (ADHD), and Autism. This chapter will consider the possible benefits of incorporating these data and the principles they imply into our existing behavioral conceptualizations of a set of childhood behavior problems. This chapter will not stand alone, and assumes some degree of familiarity with this set of concepts, which are covered in the initial chapters of the book and elsewhere (e.g., Hayes et al., 2001).

Tourette's Disorder

Tics are defined as sudden, repetitive, stereotyped movements and vocalizations (American Psychiatric Association, 2000). Children with tic disorders may present with simple or complex tics. Simple tics are relatively short and discrete in duration such as a cough or a hard eye blink, whereas complex tics are much more prolonged and may include tics such as twirling or singing. Tic disorders are categorized by tic type (motor or vocal), and the length of time the tics are present. The tic disorder is considered to be transient if the tics have been present for less than one year, and chronic if the tics are present for over a year. If both motor and vocal tics are present, a diagnosis of TD is warranted. Motor tics are those that involve contractions of muscle groups and vocal tics are those that involve repetitive sounds or vocalizations, although the distinction is imprecise because vocal tics certainly involve contractions of muscles necessary for vocalizations.