The Role of Adult Attachment Styles in Psychopathology and Psychotherapy Outcomes

Hal S. Shorey and C. R. Snyder
University of Kansas, Lawrence

Attachment theory provides a model for understanding how the attachment styles formed in infancy systematically affect subsequent psychological functioning across the life span. Attachment styles provide the cognitive schemas, or working models, through which individuals perceive and relate to their worlds. In turn, these schemas predispose the development of psychopathologies and influence outcomes when people undergo psychotherapy. After reviewing recent empirical findings, the authors conclude that an understanding of attachment theory facilitates the conceptualization of clients' problems and the selection of appropriate interventions. Accordingly, attachment styles should be assessed as a standard part of treatment planning. Furthermore, the authors propose that attachment styles should be assessed as individual difference variables in psychotherapy outcome research because adult attachment styles dictate how people perceive and respond to their environments and, therefore, how clients respond differentially to various treatments.

According to attachment theory, our interpersonal styles are ingrained through prolonged early childhood interactions with primary caregivers. In turn, these interpersonal styles are posited to shape how we perceive and respond to others and to our environments across the life span (see Bowlby, 1982). Bowlby posited that children develop cognitive, behavioral, and emotional schemas that are specifically tailored to maintaining proximity to parents. Because parents differ in their child-rearing styles, the schemas that children develop tend to coalesce into distinctly identifiable patterns. These characteristic patterns, or attachment styles, become the roadmaps (i.e., working models) for negotiating social environments and they act as self-fulfilling prophecies wherein individuals behave in ways that elicit schema congruent behaviors from others. The responses from others then reinforce the working models until those models become deeply ingrained personality structures. Thus, not only do attachment styles foster positive perceptions and developments, but they also may predispose individuals to experience various forms of psychopathology.

The present article will make the case that personality disorders can be conceived as disorders of attachment. Moreover, because attachment styles shape perceptions and reactions to others, it follows that attachment styles also should influence how individuals perceive the therapeutic process and respond to different psychotherapy treatments. In this regard, research on treatment outcomes leads to the conclusion that attachment theory not only is a useful framework for understanding life span development, personality, and psychopathology, but it also provides the means of conceptualizing clients' problems and selecting appropriate treatments.

Attachment Theory

Development of Attachment Styles

Current attachment research uses models that are congruent with the one proposed by John Bowlby more than 30 years ago (see Bowlby, 1982). Dissatisfied with psychoanalytic theories proposing that a child forms a strong bond to the mother because she is the source of food, Bowlby sought guidance from his contemporaries in the biological sciences. He concluded that, similar to the process in animals, human

Hal S. Shorey and C. R. Snyder, Department of Psychology, University of Kansas, Lawrence.
C. R. Snyder is deceased.
Correspondence concerning this article should be addressed to Hal S. Shorey, Department of Psychology, 211 Fraser Hall, 1415 Jayhawk Boulevard, The University of Kansas, Lawrence, KS 66045. E-mail: shorey@ku.edu

attachment could be understood in terms of evolutionary theory. Accordingly, Bowlby (1988) postulated that: (a) emotional connections between individuals have survival value; (b) attachment behaviors have neural corollaries in the structure of the central nervous system; (c) each partner in an attachment dyad builds internal mental representations of the other (i.e., working models) in order to maintain a sense of proximity in the event of separation; and (d) development occurs continuously, rather than in discrete phases. Furthermore, and of particular importance for our thesis in this review, Bowlby (1988) proposed that the attachment styles developed and internalized in early childhood are perpetuated across the subsequent life span and have direct impacts on adult mental health.

Building on Bowlby's theory, Mary Ainsworth and her colleagues (1973; Ainsworth, Blehar, Waters, & Wall, 1978) developed the "Strange Situation" paradigm in order to study the behaviors of infants who were separated temporarily from their mothers. Out of this research, Ainsworth identified three infant attachment styles—secure, anxious-ambivalent, and avoidant.

Ainsworth's securely attached infants acted somewhat distressed when their mothers left, but greeted them eagerly and warmly upon their returns. Anxious-ambivalent infants were distraught and protested when their mothers left; upon their mothers' returns, these infants continued to be distressed and protested even though they wanted to be comforted and held. Avoidant infants, in contrast, seemed relatively undisturbed both when their mothers left and returned. Such behavioral avoidance, however, should not be taken to mean that such avoidant children do not want to maintain proximity to their mothers. Rather, as we will elaborate shortly, this style is what enables these children to maintain proximity to parents who otherwise may reject them. Regardless of the type of attachment, it is assumed that all children seek close proximity to their parents (Ainsworth et al., 1978).

In addition to the original three attachment styles that were identified by Ainsworth et al. (1978), contemporary researchers have identified a fourth childhood attachment style that lacks consistent behavior patterns (Carlson, 1998; Main, 1996). This disorganized attachment style is characterized by chaotic and con-

flicted behaviors in response to the Strange Situation task. Such observed behaviors have included children exhibiting simultaneous approach and avoidance behaviors (i.e., approaching the caregiver and then freezing mid-stride; Main & Solomon, 1990). The advantage of adding this disorganized attachment style is that it allows the classifying of children who previously did not fit into any of Ainsworth's original categories (Main & Solomon, 1990).

Because the overriding goal in early childhood is to acquire and maintain security (Bowlby, 1982), children develop attachment styles that are suited specifically to the types of parenting that they encounter. For example, Ainsworth found that parents of secure infants were sensitive, attuned, and accepting (Ainsworth et al., 1978). Their children, in turn, viewed their attachment figures as being dependable and available. Thus, according to Mikulincer and Shaver (2003), because securely attached children are unconcerned about security needs, they are free to direct their attentions and energies toward exploring the environment and other non-attachment-related activities.

Rather than engaging in exploratory behaviors, insecure infants must direct their attentions and energies to maintaining their attachments to otherwise inconsistent, unavailable, or rejecting parents. For example, because a child is able to maintain proximity to the parents only by behaving as if the parents are not needed, that child may learn not to express needs for closeness or attention (Main, 1990). Thus, avoidant children suppress expressions of overt distress. Over time, such suppression may occur below the level of consciousness such that avoidant youngsters may not acknowledge to themselves their own distress. Furthermore, rather than risking further rejection in the face of attachment figure unavailability, such children may give up on their proximity-seeking efforts. Taken together, these emotion regulation and behavioral patterns have come to be labeled as "deactivating strategies" (see Mikulincer & Shaver, 2003).

Anxious-ambivalent children display their own response contingency pattern. Rather than deactivating their attachment systems, however, anxious-ambivalent children employ "hyperactivation" strategies (Mikulincer & Shaver, 2003). Although the parents of anxious-ambivalent children may not be overtly rejecting, they

often are unpredictable and inconsistent in their responses. Fearing potential caregiver abandonment, therefore, such children maximize their efforts to maintain close parental attachments (Main, 1990). Thus, anxious-ambivalent children become hypervigilant for threat cues and any signs of rejection.

In contrast to those young children who faithfully use their avoidant and anxious-ambivalent styles to maintain proximity and attachments to parents, disorganized infants seem incapable of applying any consistent strategy to bond with their parents. In this latter case, these conflicted and disorganized child behaviors reflect their best attempts at gaining some sense of security from parents who are perceived as frightening (Carlson, 1998). For example, when afraid and needing reassurance, a child may have no option other than to seek support from a caregiver who also is frightening. In such circumstances, the parents may be hostile or they may be fearful and unable to hide their apprehensions from their children. In either case, the child's anxiety and distress are not lessened. Instead, one source of stress is merely traded for another, thereby leaving these children with no viable coping options (Carlson, 1998).

Although the children with disorganized attachments typically do not attain senses of being cared for, the avoidant and anxious-ambivalent children do experience some success in fulfilling their needs for care. Unfortunately, however, these latter successes may be achieved partially through cognitive distortions. For instance, the child may use a splitting defense (Lopez, Fuendeling, Thomas, & Sagula, 1997) to maintain attachment to a rejecting or abusive parent. Such "splitting" involves the maintaining of positive parental images in awareness, and pushing the negative views out of consciousness by internalizing them or by attributing them to more distal others (Kernberg, 1975). Splitting thus allows children to believe, even in the face of disconfirming evidence, that their parents will value and protect them. If rebuffed, such children then internally attribute the rejecting parental behaviors to their having been bad children as opposed to the less desirable view that their parents simply do not care. This example illustrates how children's insecure attachment styles represent their best attempts to get their security needs met when primary caregivers behave in aversive and unfulfilling ways

(Main, 1990). The price exacted for this perceived security is high, however, because these early childhood working models are likely to become maladaptive in the context of later adolescent and adult relationships that pertain to friendships or romance.

Adult Attachment Styles

Although, as Bowlby (1982) suggested, the behaviors of parents toward their children are inextricably linked to the type of attachments that the children develop, the cognitive schema underlying these attachment styles begin to take on lives of their own once they are internalized by the children. Acting as self-fulfilling prophesies, these attachment styles lead the developing child to behave in ways that are consistent with how he or she expects to be treated by others (see Hazan, 1992, cited in Batgos & Leadbeater, 1994). In turn, such child behaviors elicit reactions from others that are consistent with the child's expectations (Allen, Coyne, & Huntoon, 1998). Accordingly, attachment-related working models are reinforced throughout the developmental years and they become the road maps for perceiving, interpreting, and responding to environments as children mature into adulthood (see Batgos & Leadbeater, 1994; Mickelson, Kessler, & Shaver, 1997). As they mature, developing children's cognitive frameworks are built upon these working models.

Attachment styles, as the expressions of the working models, can be assessed through adults' self-reported behaviors in close relationships and through their narratives about their childhoods coded by trained interviewers. These various means of assessment, however, have led to disagreement about how to define the adult attachment styles. The published descriptions of the styles are highly similar across interview and self-report methodologies. Nevertheless, some researchers argue that the methods are assessing different underlying constructs. Furthermore, even within the self-report methodologies, various classification systems with three, four, or even five factors have been developed. Thus, even though all of these measures were purportedly derived from Bowlby's (1982) theory and are held by their proponents to correspond with the childhood styles identified by Ainsworth and her colleagues, much of the research generated over recent years may be

difficult to assimilate for those who are not experts in the attachment field. Accordingly, in the next section we will describe the most frequently used classification systems and attachment style definitions so as to help the reader draw meaningful correspondences between measures in reading the later sections on psychopathology and psychotherapy.

Measurement of Adult Attachment Styles

Narrative accounts of childhoods are assessed using the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985). The AAI is a semistructured interview that probes for attachment-related autobiographical memories from early childhood, and it asks respondents to evaluate those memories from their current adult perspectives. Coding of AAI transcripts is not based strictly on childhood attachment experiences, per say, but instead it draws heavily upon the ways in which participants describe and reflect upon their experiences (Main & Goldwyn, 1991). As such, what is tapped is not the content of memory, but rather the way that thoughts and memories are organized differentially according to the quality of early parent–child relationships. It is these patterns of cognitive organization that produce the AAI's four attachment styles, which are labeled secure, dismissing, preoccupied, and disorganized (Hesse, 1999).

The attachment styles assessed by the AAI are conceptually similar to the interpersonal schemas tapped by self-report measures of adult attachment (Bartholomew & Shaver, 1998). Similar to the development of the AAI, Hazan and Shaver (1987) developed the first (forced-choice) self-report measure of adult romantic styles so as to correspond to the infant secure, avoidant, and anxious-ambivalent attachment styles (Feeney, Noller, & Hanrahan, 1994). Research participants responding to Hazan and Shaver's (1987) measure were asked to choose the one attachment style description (based on the infant attachment patterns) that fit them best. Bartholomew and Horowitz (1991) later expanded this model by defining the attachment styles based upon two dimensions—models of self and models of others. The secure styles was defined as representing positive models of self and others, and the preoccupied styles was defined as representing a negative model of self while maintaining a positive model of others. Based upon differing views of self and other, Bartholomew and Horowitz (1991) conceived of their model as dividing Hazan and Shaver's avoidant category into two styles—dismissing (positive models of self and others) and fearful (negative models of self and others).

The dismissing group in Bartholomew and Horowitz's (1991) conceptualization was described as resembling Hazan and Shaver's (1987) prototypic avoidant style—as being unconcerned about being involved in relationships with others. Bartholomew and Horowitz's (1991) fearful group, in contrast, was held to be behaviorally avoidant because of the fear of potentially painful interpersonal rejections. In other words, the fearful group was anxious about relationships. Thus, although Bartholomew and Horowitz (1991) in theory parsed the avoidant style, we believe that, at an empirical level, their measure may have introduced some overlap with anxious attachment. Indeed, when Brennan, Clark, and Shaver (1998) relabeled Bartholomew and Horowitz's two dimensional space according to levels of attachment avoidance and attachment anxiety, the fearful group was defined as scoring high on both the attachment avoidance and attachment anxiety dimensions (see Figure 1).

Conceptually, then, those with fearful styles of attachment can be conceived as simultaneously wanting to approach and to avoid attachment figures. This simultaneous approach and avoidance can be seen in the behaviors of the children who were classified as disorganized
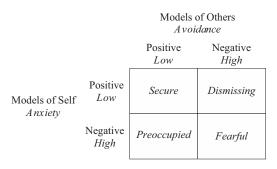
	Models of Others *Avoidance*	
	Positive *Low*	Negative *High*
Models of Self *Anxiety* — Positive *Low*	*Secure*	*Dismissing*
Negative *High*	*Preoccupied*	*Fearful*

Figure 1. Four-category attachment typology developed by Bartholomew and Horowitz (1991) based on models of self and models of others, and reframed by Brennan et al. (1998) according to levels of attachment anxiety and attachment avoidance.

in the Strange Situation paradigm. In this regard, Simpson and Rholes (2002) suggested that the fearful adult style may be the adult version of the disorganized infant attachment style. Because the adult AAI disorganized category also represents the adult version of the childhood disorganized style, corollaries can be drawn reasonably between the adult disorganized and fearful styles as representing similar, if not the same, underlying construct when interpreting research results.

Having to draw such theoretical comparisons between the various models and their corresponding styles, however, highlights the sometimes fragmented state of contemporary attachment literature. Moreover, the models reviewed here are just the most popular of many. For this reason, and in order to provide a more unified approach within the field, Brennan et al. (1998) suggested using their Experiences in Closer Relationships Scale's (ECRS) avoidance and attachment anxiety dimensions as continuous measures and no longer use the categorical attachment schemes at all (see also Shaver & Mikulincer, 2002).

The ECRS was constructed by combining all known self-report adult attachment scales into a single measure (323 items), factor analyzing the items, and retaining those 36 items with the highest absolute-value correlations with one of the two higher-order avoidance or anxiety factors. These two factors usually are not correlated (Brennan et al., 1998), and are analogous to the two dimensions of attachment first identified by Ainsworth and her colleagues (Ainsworth et al., 1978; see Shaver & Mikulincer, 2002). As suggested by our aforementioned comparison of the disorganized and fearful adult attachment styles, the ECRS (Brennan et al., 1998) also yields theoretically congruent, high correlations with similarly labeled scales from other measures of adult attachment (including the AAI). For this reason, it should not matter whether the measure of adult attachment in question purports to assess cognitive organization of childhood memories (AAI), general interpersonal style (Attachment Style Questionnaire; Feeney et al., 1994), models of self and others (Bartholomew & Horowitz, 1991), or experiences in close relationships (Brennan et al., 1998). What matters is that each of the identified attachment styles guides perceptions, thoughts, and behavior in theoretically consis-

tent ways across measurement models (for a more thorough juxtaposition the self-report and AAI interview methodologies, see Shaver & Mikulincer, 2002).

Continuity of Attachment Styles

Bowlby's (1982) view that attachment styles established in infancy are stable across the life span has been supported by empirical research (Diehl, Elnick, Bourbeau, & Labouvie-Vief, 1998; Hazan & Shaver, 1987). Adults' attachment styles were found to correspond with memories of parenting in childhood that are theoretically congruent with those same attachment styles (Diehl et al., 1998). Also, percentages for the three main attachment styles found in adult samples (56% secure, 25% avoidant, 19% anxious-ambivalent) are similar to the percentages reported by Ainsworth et al. (1978; Hazan & Shaver, 1987). Thus, Rothbard and Shaver (1994) concluded that, "the list of parallels between childhood and adult attachment dynamics continues to grow, increasing our confidence that attachment is fundamentally similar in childhood and adulthood" (p. 61).

Despite these similarities, recent research supports the more conservative view that attachment styles are malleable. Accordingly, attachment styles may be modified in the context of close interpersonal relationships (Rothbard & Shaver, 1994) or negative life events (Hamilton, 2000; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000). In other words, change can result via sustained disconfirming evidence that contradicts the internal working models developed in early childhood (Bretherton, Ridgeway, & Cassidy, 1990; Rothbard & Shaver, 1994).

New evidence pertaining to the continuity or discontinuity of attachment styles has been provided by longitudinal studies in which infants who originally were classified using the Strange Situation paradigm (Ainsworth et al., 1978) enter into adulthood (Hamilton, 2000; Lewis, Feiring, & Rosenthal, 2000; Waters et al., 2000; Weinfield, Sroufe, & Egeland, 2000). Results of these studies are summarized in Table 1. Three studies used similar methodologies with different samples, and assessed attachment in childhood with the Strange Situation (Ainsworth et al., 1978; see Waters, 1978) and in early adulthood with the AAI. The first study assessed a sample of young adults raised in middle-class

Table 1
Summary of Studies on the Continuity of Attachment from Infancy to Young Adulthoood

Study	Sample characteristics	Age at final assessment	% retaining one of the three infant classification	% retaining their secure or insecure classification
Waters et al. (2000)	Lower to upper middle class	21–22	64	72
Hamilton (2000)	Conventional and unconventional families	17–19	63	77
Weinfield et al. (2000)	Low income, high risk	18–19	39	51
Lewis et al. (2000)	Middle to upper middle class	18	Not reported	51

families and found that from infancy to age 21 or 22, 64% of persons retained one of the original three attachment classifications (72% for secure vs. insecure groups; Waters et al., 2000). The second study assessed attachment at age 17 to 19 in a sample of adolescents raised in either traditional or alternative lifestyle families (single mother, cohabiting nonmarried couples, communal living, "creedal" community groups), and found similar results; 63% of these adolescents retained their infant attachment classifications (77% for secure vs. insecure; Hamilton, 2000). In both studies, those young persons who had changed their attachment classifications (Waters et al., 2000), or those who retained their insecure infant classifications (Hamilton, 2000), were more likely to have experienced one or more negative life event (loss of a parent, parental divorce, life-threatening illness in a parent or the child, parental psychotic disorder, or physical or sexual abuse by a family member).

Waters et al. (2000) found that having experienced at least one of these negative events was related significantly to the likelihood of a secure infant becoming insecure by early adulthood. Sixty-six percent of such negative event infants in the Waters et al. (2000) sample changed attachment classifications in this way. Those infants who experienced no negative events, in contrast, had only a 15% probability of becoming insecurely attached by early adulthood.

Hamilton (2000) took a slightly different view than that held by Waters et al. (2000) in regard to the dynamics of attachment style change. Rather than negative life events leading to changes from secure to insecure styles, Hamilton (2000) asserted that negative life events operated in terms of maintaining insecure attachments. None of the insecurely attached in-

fants in Hamilton's sample who had experienced at least one negative life event ($N = 15$) changed to a secure style by late adolescence. The two insecure infants who did change to a secure style had experienced no negative life events. Half (50%) of the secure infants in Hamilton's study who experienced a negative event changed to an insecure style.

Overall, negative life events were related to the probability that securely attached infants would become insecurely attached (66%, Waters et al., 2000), and to the probability that insecure infants would remain insecure, but not to changes among the insecure attachment categories (Hamilton, 2000; Waters et al., 2000). Whereas negative life events did have an impact on attachment style change, family structure did not. Those from nontraditional families were no more likely than those raised in traditional families to have experienced negative life events (Hamilton, 2000).

The previous two studies were comprised of middle-class samples. The third study using this methodology assessed continuity of attachment in a 19-year-old, low-income, high-risk cohort (mothers were young, mostly single, impoverished, had not completed high school, and most had unplanned pregnancies; Weinfield et al., 2000). Due to the risk factors associated with this group, negative life events were not investigated; rather, the presence of such negative life events was assumed, with 91.2% of participants having experienced at least one negative life event. Therefore, attachment styles also were expected to be less stable. Consistent with this hypothesis, the degree of continuity among the three attachment styles from infancy to adulthood was not significant, with only 38.6% retaining their infant attachment classification. When the participants in this study were infants,

a secure classification was the mode. As young adults, however, an insecure/dismissing classification was predominant, with maternal depression being a significant predictor of attachment style change.

Overall, these three studies were purported to support the attachment theory predictions that attachment styles retain stability under ordinary circumstances, but that they change if negative events alter caregiver behavior (Waters et al., 2000). An additional longitudinal study of a middle-class sample, however, did not find continuity of attachment styles from infancy to age 18 (Lewis, Feiring, & Rosenthal, 2000). In this group, only 51% of participants retained their infant attachment classifications. Nevertheless, consistent with the negative life events hypothesis, Lewis et al. (2000) found that by age 18, individuals from divorced families were significantly more likely to be insecurely attached in comparison to those from intact families (89% vs. 35%, respectively).

In a related vein, gerontologists investigating attachment styles among older adults recently have documented a greater prevalence of dismissing attachment among older as opposed to younger cohorts (Diehl et al., 1998; Magai & Cohen, 1998; Magai, et al., 2001; Magai, Hunziker, Mesias, & Culver, 2000; Webster, 1997). One possibility offered to explain this finding was that harsh emotion socialization (i.e., harsh toilet training and feeding schedules; restriction on the expression of affect) was normative for older birth cohorts in light of the likelihood of having been exposed to the "Watsonian" child rearing practices of the 1920s and 1930s (Magai, 2001; Magai, Consedine, Gillespie, O'Neal, & Vilker, 2004). Perhaps because of the perception that such punitive child-rearing practices were normative, and hence internalized as evidence of good parenting, however, dismissing attachment among older adults has related more strongly to positive affect and less strongly to negative affect in comparison to younger adult samples (Magai et al., 2004). These findings not withstanding, the general consensus among researchers on older adult attachment is that the relations between emotion and attachment are similar to those documented in young adults (Consedine & Magai, 2003).

Despite the inference of continuity made by researchers in discussing dismissing attachment among older adults in terms of their early socialization experiences, we currently are decades away from having access to longitudinal data on the continuity of attachment into old age. Contextual factors and hardships faced while aging (i.e., deaths of friends and relatives, quality of life issues) also may contribute to increases in prevalence rates of attachment avoidance. In reviewing research on the continuity of attachment styles or the research on attachment style change more generally, therefore, one should remain cognizant that attachment styles are not all or nothing, either/or constructs. Although each person has a dominant style, this style may exist concurrently with other less dominant working models (Mikulincer & Shaver, 2003).

Attachment theory proposes that interactions with a primary caregiver in childhood result in episodic memories that form secure or insecure working models of relationships in adulthood. Most people, however, have had more than one attachment figure over the course of development. Therefore, even those who had insecure relationships with primary caregivers may at times have found security in a supportive and available other. Such a person may have been a grandparent, an aunt or uncle, or, later on, a caring teacher, coach, friend, or romantic partner. Each of these relationships would have resulted in episodic memories of times in which security and comfort were attained successfully. Through a process of spreading activation across the neural network, current events or even subliminal cues that are similar to those events in memory may activate those memories and make them more salient. In this way, current events can prime the activation of latent secure or insecure working models (see Mikulincer & Shaver, 2003).

Research has revealed that these latent attachment styles can be primed by environmental stimuli (Mikulincer, Gillath, & Shaver, 2002), thus providing one possible explanation for inconsistencies in the continuity of attachment styles. In this regard, we believe that when discrepancies are found between infant and adult attachment styles, it is not clear whether the change represents a relatively permanent shift in core relational schema or a temporal fluctuation relating to priming effects. For example, when a working model is activated by current environmental stimuli, it primes congruent cognitions and inhibits incongruent ones

(Mikulincer & Shaver, 2003). As such, the experience of a secure adult romantic relationship, if successfully established by an insecure person, should make more accessible memories of positive relational experiences. Thus, the presence of a dependable, secure base, in the person of a close friend or romantic partner, potentially could increase the likelihood of detecting a secure style when assessed. Nevertheless, it is not clear whether sustaining such disconfirming relational experiences over long periods of time can alter permanently a person's attachment style, or whether a person with a core insecure style would be expected to revert to the default insecure style in times of stress or after a negative life event. Although research is needed to identify these relationships, we suspect that the latter is most likely the case.

Fluctuations in attachment styles do not contradict the tenets of attachment theory, but rather, in our view, they support them. Given the possibility of priming effects, results indicating 63% to 64% concordance, or even 51% concordance between infant and adult styles, are robust. In addition, studies demonstrating that attachment styles can be made more or less cognitively accessible give promise that they can be intentionally changed through the application of targeted treatments and interventions.

Infant Attachment and Adult Psychopathology

Even when infant attachment styles do not predict adult attachment styles, they do predict adult psychopathology (Carlson, 1998). For example, Carlson (1998) investigated the relationship between disorganized attachment at age two and later attachment style and adjustment at age 19. Children of mostly single (68%) and low-education mothers (39% had not completed high school) were assessed at ages 12 months to 18 months using the Strange Situation procedure, and at ages 17.5 and 19 were assessed for psychopathology using the Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS; Amborsini, Metz, Prabucki, & Lee, 1982). The results revealed that disorganized infants, relative to the infants with other attachment styles, exhibited significantly more problems throughout their developmental histories. They had behavior problems in preschool, internalizing problems and dissociation in elementary school and high school, psychopathology at age 17.5 (based on a 7-point rating of number and severity of K-SADS diagnoses), and dissociation at age 19. Some of the intermediate outcomes, such as the elementary school behavior problems, as well as parent–child relationship quality at age 13, also made unique contributions to the prediction of later adolescent psychopathology.

Carlson (1998) proposed that these results suggested a two-way interactive process in which early distortions in the regulation of emotions and behaviors as experienced in the parent–child relationship lead to later disturbances which, in turn, feed back and consolidate insecure attachment patterns (Carlson, 1998). She also proposed that the early *dis*-regulation of emotional systems leads to long-term consequences for the infant's neurological organization. In this regard, contemporary theorists propose that severe failures of early attachment relationships, and specifically the abuse and neglect associated with disorganized attachment patterns, are likely to impair the right brain's regulatory stress- and coping-related functions and, by extension, to produce maladaptive infant and adult mental health (Perry, Pollard, Blakley, Baker, & Vigilante, 1995; Schore, 2001).

Although researchers have found few mediating effects between early parenting and adult mental health (Gittleman, Klein, Smider, & Essex, 1998), Carlson found that attachment disorganization mediated the relationship between early caregiving and later psychopathology, and partially mediated the relationship between early caregiving and dissociation ratings. Similarly, in our laboratory, we (Shorey, Snyder, Yang, & Lewin, 2003) found that adult attachment mediated the relationship between recollected parenting and hope and, in turn, that hope partially mediated the relationship between attachment and adult mental health.

Adult Attachment and (DSM–IV Axis II) Personality Disorders

Various researchers have viewed personality disorders as disorders of attachment (Shaver & Clark, 1994; West & Sheldon-Keller, 1994), with the line between normalcy and pathology being one of degree rather than the clear presence or absence of a given trait (Millon, 1996).

Brennan and Shaver (1998) proposed that attachment theory can be used to understand the etiology of personality disorders, and that both attachment styles and personality disorders should evidence a significant amount of overlapping variance because they share similar developmental histories and underlying structures. Thus, attachment styles and personality disorders can be viewed as different levels of analyses of the same underlying constructs.

Results relating attachment styles to personality disorders are consistent with the defining characteristics of each attachment classification, thereby suggesting that personality disorders are more severe manifestations of attachment disruptions. Thus, secure participant's high levels of sociability and self-esteem may be reflected in their scoring higher than those with other attachment styles on scales representing Histrionic (Allen et al., 1998; Brennan & Shaver, 1998) and Narcissistic personality disorders (Allen et al., 1998). Avoidant participants' greater livelihoods of receiving diagnoses of Schizoid (dismissing and fearful; Brennan & Shaver, 1998) or Schizotypal (fearful, Allen et al., 1998) are indicative of their pervasive disavowal of attachment needs and excessive self-reliance (Millon, 1996). Fearfully attached and preoccupied individuals, both of whom score high on the dimension of attachment anxiety, are more likely to be diagnosed as having an Avoidant personality (Brennan & Shaver, 1998). On this point, although those with an Avoidant personality may be "actively" detached in a manner similar to individuals with a Schizoid personality disorder, they actually are hypersensitive to social cues, particularly those involving potential rejection (Millon, 1996). Lastly, preoccupied individuals, with their pervasive needs for approval and acceptance, are more likely that those with other attachment styles to receive a diagnosis of Dependent personality disorder (Brennan & Shaver, 1998).

Overall, Brennan and Shaver (1998) found that the percentages of those with a personality disorder were: secure (60.6%); fearful (92.4%); preoccupied (90.5%), and; dismissing (79.5%).[1] In this regard, although it is apparent that insecure attachment generally is a risk factor for personality disorders, Brennan and Shaver (1998) concluded that those persons with a fearful attachment style were the most troubled, having a high prevalence of Avoidant, Self-Defeating, Narcissistic, and Obsessive/Compulsive disorders (Brennan & Shaver, 1998). Persons with fearful attachment styles also had the highest rates of personality disorders representing some kind of distortion of reality or negativity about others (i.e., paranoid, schizotypal, and borderline; Allen et al., 1998; Brennan & Shaver, 1998).

Although researchers have found that a majority of borderline patients endorsed an avoidant attachment style (68%), preoccupied attachment also has been found to relate specifically to Borderline personality disorder (Allen et al., 1998). The fact that both fearful and preoccupied persons have been found to be more likely than dismissing or secure participants to have a Borderline personality is consistent with the characteristics of these attachment styles as well as with the biosocial model of Borderline personality disorder proposed by Linehan (1993). Having grown up in environments with inconsistent and unpredictable parental responses, preoccupied adults are likely to be unsure of what constitutes appropriate behavior in a given context. Thus, these adults never may have internalized cognitive schemas relating to cause and effect interactions in personal relationships. Lacking these causal linkages, they may become confused or even surprised by the responses that they elicit from others; furthermore, because they have trouble regulating their own subjective distress, they are likely to behave unpredictably in interpersonal situations (Allen et al., 1998).

For fearful persons, who have similar elevations as do the preoccupied individuals on the attachment anxiety dimension, their conflicting goals and splitting defenses may compound the deficits relating to empathic attunement and affect regulation mentioned in the preceding paragraph. Fearful persons simultaneously have the goals of wanting to be close to others and wanting to protect themselves from potential injury by avoiding others. With such internal conflicts, they are likely to enter into close relationships, only to find that these relationships subse-

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[1] In interpreting these results, it is important to note that the measure used in this study had a positive response bias resulting in 75% of the sample being ascribed as having a personality disorder ($Mdn = 2$; $M = 2.45$).

quently cause them a great deal of distress. Chronologically, therefore, they initially may exhibit extreme friendliness and intimacy, followed by attacking or alienating behaviors that distance them from the very persons whom they sought to befriend or love. Similarly, as children, these fearfully attached individuals may have used splitting defenses to maintain the illusion of being rejected because of their bad behaviors rather than their parents not caring for them. Habitual reliance on this splitting defense may lead to its widespread application and the stark view that things and people are all good or all bad (Kernberg, 1975).

Another way of avoiding a hostile parent's abuse is to disown one's angry and hostile thoughts. Through such a splitting off of emotions, individuals lose touch with their own feelings and thereby are at risk for developing psychopathology (Kramer & Loader, 1995). Thus, some children may lose touch with their own emotions through prolonged interactions with parents who consistently invalidate the legitimacy of their ongoing childhood subjective experiences (Linehan, 1993). This habitual forfeiting of one's valid subjective experiences for affective expressions that are more externally acceptable can lead to incongruence between the experience and expression of affect, along with later life difficulties in affective regulation.

Because of the importance that attachment theory assigns to affective regulation, several studies have examined the relationships between attachment styles and alexithymia (Scheidt et al., 1999; Troisi, D'Argenio, Peracchio, & Petti, 2001). Alexithymia is a set of personality traits characterized as "a disorder of emotion regulation, which involves a dissociation of emotional and physiological responses to stress and which is associated with difficulties in three interrelated areas of cognitive processing: difficulty identifying feelings; difficulty describing feelings; and a cognitive style labeled as 'externally oriented thinking'" (Scheidt et al., 1999, p. 187). Again, as our examination of the Borderline "disorder" illustrates, the fact that this set of personality traits has been given a name (Alexithymia) should not lead us to the erroneous conclusion that it is more than a manifestation of insecure attachment patterns.

In examining the relationships between attachment styles and alexithymia in a clinical sample, Troisi et al. (2001) found that 42% of persons with an alexithymia diagnosis were preoccupied, 31% were fearful, 22% were dismissing, and only 5% were secure, with overall prevalence rates of alexithymia among the insecure styles of preoccupied = 65%, fearful = 73%, and dismissing = 36%. It is noteworthy that the components of alexithymia relating to difficulties in identifying and describing feelings in this study were related to insecure attachment, whereas the third component of alexithymia, externally oriented thinking, was not.

In contrast to the finding of Troisi et al. (2001), researchers using the AAI found that alexithymia was associated with the dismissing and disorganized attachment styles, but not with preoccupied attachment (Scheidt et al., 1999). Scheidt et al.'s (1999) findings relating to dismissing attachment, in contrast to the pattern of relationships detected by Troisi et al., were due almost exclusively to the relationship between insecure attachment and externally oriented thinking. Consistent with theory underlying measures of adult attachment, this suggests that self-report measures of adult attachment may assess more conscious aspects of working models (i.e., awareness of one's own feelings and the ability to describe those feelings to others), whereas the AAI may assess aspects of working model relating more to the structure of cognition (i.e., externally oriented thinking). As such, findings from studies of attachment and alexithymia may reflect criterion overlap between the constructs. It follows that alexithymia can be viewed as an insecure attachment pattern (see McDougall, 1974) that is related to the content (knowledge of one's feelings) and structure (thought patterns) of insecure working models.

Other disorders of personality similarly overlap with attachment styles and can be understood within an attachment theory framework. For example, consider sociotropy, which is a personality style involving excessive dependence and concerns about abandonment combined with a high need for approval (Murphy & Bates, 1997). This sounds very similar to the description of the preoccupied attachment style. As would be expected, secure and dismissing attachment were not found to be related to sociotropy, whereas preoccupied, and to a lesser degree fearful attachment were (Murphy & Bates, 1997). These findings are congruent with

the preoccupied and fearful styles' negative models of self and high degree of attachment anxiety.

As previously reviewed, those people with attachment anxiety are hypersensitive to interpersonal threats and are very reactive to interpersonal stressors. As such, they also may be prone to develop Schizotypal tendencies. Wilson and Costanzo (1996) investigated the relationships between attachment styles and Schizotypal tendencies (bizarre beliefs, magical ideation, anhedonia) in a sample of young adults. They found that anxious attachment was associated with more positive symptomology, and avoidant attachment was associated with more positive and more negative symptomology. These findings provide tentative support for a diathesis stress model of schizophrenia spectrum disorders (*DSM–IV* Axis I and Axis II). More specifically, an insecure attachment pattern is a diathesis that, when triggered by an interpersonal stressor (made more salient by insecure negative working models), activates a latent disease process.

A history of insecure attachments and traumatic interpersonal relationships also has been implicated in the development of depresogenic and masochistic attitudes (Allen et al., 1998). According to Allen et al. (1998), such depresogenic and masochistic attitudes (the belief that one must suffer to be loved or to avoid future attack) are maintained through a pattern of re-enactment. In this regard, masochistic attitudes may enable people to perceive some control over their suffering. Others may find these dependent and depressive-masochistic behaviors aversive, however, and thereby respond with feared criticism, abandonment, and rejection (Allen et al., 1998). Such negative events, therefore, further increase the probability of the onset of anxiety, depression, or other clinical disorders.

Adult Attachment and (DSM–IV Axis I) Clinical Disorders

Several studies with nationally representative samples of adolescents and young adults have found strong relationships between attachment styles and psychopathology (Cooper, Shaver, & Collins, 1998; Mickelson et al., 1997). Furthermore, as would be expected, when differences were found in levels of psychopathology, these typically were between the securely and insecurely attached groups.

Relative to avoidant and anxious-ambivalent participants, those with secure styles experienced significantly less general anxiety, panic, social and simple phobia, agoraphobia, PTSD, obsessive–compulsive tendencies, paranoid ideation, psychoticism, somatization, mania, dysthymia, and depression (Cooper et al., 1998; Mickelson et al., 1997). Perhaps the biggest surprise in these findings was that no differences were found between avoidant and anxious-ambivalent adolescents in relation to general anxiety. In this vein, the only differences among the insecure styles were detected by Cooper et al. (1998) in relation to depression and hostility. Consistent with findings in the infant attachment literature that anxious-ambivalent infants experience intense anger (Ainsworth et al., 1973), anxious-ambivalent adolescents manifested higher levels of hostility and depression than either their avoidant or secure counterparts (Cooper et al., 1998). Findings of lower levels of negative emotionality among avoidant participants likely reflected their having learned as children to deny distress and to suppress negative emotions so as to deflect caretakers' rejections (Cooper et al., 1998).

Having an avoidant style is not always a bad thing. Because they are less likely to be influenced by peers, avoidant youngsters were significantly less likely than either secure or anxious-ambivalent youngsters to have engaged in substance use. Once drug or alcohol use is initiated, however, Cooper et al. (1998) suggested that avoidant individuals should evidence higher rates of use and more problems than their secure counterparts. This is because avoidantly attached individuals experience greater distress related to their social isolation and their less adaptive ways of coping. Support for this proposition came from Mickelson et al. (1997), who found significantly higher rates of alcohol and drug abuse among avoidant as compared to secure or anxious-ambivalent persons.

Roberts, Gotlib, and Kassel (1996) found that avoidant and anxious-ambivalent attachment were positively related, and secure attachment was negatively related to severity of depressive symptoms. Moreover, analyses of the three attachment styles indicated that anxious-ambivalent was the only one that made a unique contribution to depressive symptomology. In analyzing a mediational model predicting depression from adult attachment across six-

and 8-week periods, Roberts et al. (1996) found that the relationship between adult attachment styles and depression was mediated almost entirely by self-esteem and maladaptive negative self-views. This relationship was observed even after controlling for initial depressive symptoms and neuroticism. Adult attachment styles, however, exerted little direct influence on depression. The authors proposed that insecure attachment influences depression by contributing to lower self-esteem, which then acts as a more proximal cause of depressive symptoms (Roberts et al., 1996).

Self-esteem and positive or negative self-views are the cornerstones of Bartholomew and Horowitz's (1991) four-category model reviewed earlier in this article. Using the Bartholomew and Horowitz (1991) measure, Gittleman et al. (1998) found that, among couples assessed one year after the birth of their child, those who were secure or dismissing had significantly less depression or anxiety than those who were fearful or preoccupied. Likewise, Murphy and Bates (1996) found that higher proportions of people classified as fearful (47%) or preoccupied (35%), as opposed to dismissing (13%) or secure (7%), were classified as depressed. Although fearfully attached individuals made up only a small proportion of Murphy and Bates' (1996) overall sample, they represented nearly half of the depressed group.

The reciprocal relationships between attachment styles and psychopathology were highlighted by Allen et al. (1998) in their investigation of complex PTSD among women being treated for trauma-related disorders. Complex PTSD, resulting from severe, repeated trauma is conceptualized as a diffuse syndrome comprised of numerous symptoms such as dissociation, depression, pathological relationship instability, identity disturbance, and predisposition to be revictimized (Herman, 1992). Because disturbances in relationships and identity disturbances are core features of trauma-related psychopathology, Allen et al. (1998) considered disrupted attachment as a cornerstone of complex PTSD. Using the Adult Attachment Scale—Revised (AAS; Collins, 1996) to assess adult attachment styles and the Millon Multiaxial Clinical Inventory-III (MMCI-III; Millon, 1994) to assess psychopathology, Allen et al. (1998) found support for their proposed model. Relative to secure attachment, insecure attachment was associated with higher scores on thought disorders and delusions, somatization, dysthymia, PTSD, anxiety, and major depression (Allen et al., 1998).

The research reviewed in this article poignantly illustrates how attachment processes are intimately linked to the development of *DSM–IV* personality (Axis II) and clinical (Axis I) disorders. Although there is not always continuity between infant and adult attachment styles, there is a great deal of continuity between infant attachment and later psychological health, as well as between adult attachment and psychopathology. The fact that attachment styles can and do change does not detract from the contributions that can be made from attachment research. On the contrary, as will be discussed in the next section, attachment styles can contribute greatly to our understanding of the etiology and maintenance of pathological states and thus lead to more effective psychotherapy interventions.

Implications of Attachment Theory for Treatment

To begin our analysis of the proposition that attachment theory has important implications for treatment and psychotherapy outcomes (Harris, 1997), we first consider the structure of the human memory system. Attachment styles lead to differential strengths and deficits in the four following areas of memory: (a) procedural memory—preconscious memories that guide our behavior under ordinary circumstances; (b) imaged memory (Crittenden, 1997)—an elaboration of affect in which unconditioned emotional responses become associated with sensory information (which are thereafter eliciting stimuli) via classical conditioning; (c) semantic memory—linguistic cognitive information related to verbal statements of how things are and under what circumstances they could change; and (d) episodic memory—mental replays of events consisting of a complex integration of affect and cognitions played back in temporal sequence.

The function of these memory systems is to order information so that it can be retrieved in such a way as to guide behavior (Tulving, 1987). As information is ordered, however, some bits either are not encoded or they are lost. Transforming sensory information into useful information, therefore, potentially involves "er-

rors, omissions, distortions, and falsification of information" (p. 40, Crittenden, 1997). Thus, according to Zeanah and Zeanah (1989), the internal working model "governs how incoming interpersonal information is attended to and perceived, determines which affects are experienced, selects the memories that are evoked, and mediates behavior with other important relationships" (p. 182).

Each attachment style and its corresponding pattern of encoding and retrieving information is targeted, more or less specifically, by differing schools of psychotherapy (Crittenden, 1997). Behavioral and family systems therapies, for example, focus on contingencies—on making procedural memories conscious and available for inspection. Cognitive therapies focus on changing faulty semantic generalizations. Psychodynamic therapies focus on retrieval of forgotten episodic memories in order to process them through to resolution. Therapies using visualization address imaged memories to help free the client from preoccupations and facilitate the use of comforting images to engender relaxation. Finally, meditative therapies emphasize the need to attain distance from distressing life events in order to achieve integration. As highlighted here, each mode of therapy targets a different construction of memory and of the corresponding attachment system. Thus, Crittenden (1997, p. 55) suggests the use of a "purposeful eclecticism" in which the therapist assesses the client's attachment state of mind and then plans treatment accordingly.

Through the reintegration of memory systems, psychotherapy promotes self-understanding in the context of personal life histories. This is accomplished by illuminating how clients' internal worlds (working models), as opposed to external forces, are what shape the present quality of their interpersonal relationships. Thus, a connection can be made between how changing inner reality can have a direct impact on the outer world and increase one's sense of security and well-being (Harris, 1997). Nowhere is this impact more clearly evident than in the transference relationship between the client and the therapist.

Because attachment styles are templates for how clients perceive and respond to others, they also dictate how clients perceive and respond to their therapists (Liotti, 2002). Such perceptions are likely to increase in intensity as the client becomes vulnerable in asking for help in ther-apy. For fearful and preoccupied clients, this increased vulnerability will activate the attachment systems and heighten affective experiences (Liotti, 2000). This activation then is likely to interfere with treatment and it is the prime reason for keeping psychotherapy sessions (where affective experiences and expressions are likely to be intense) and skills training sessions (where clients are expected to acquire affective and cognitive management techniques) separate components in Linehan's (1993) treatment for borderline personality disorder. In contrast to the highly reactive preoccupied and fearful clients, however, for clients with dismissing attachment styles (who are afraid of dependency) such increased vulnerability is likely to increase resistance and the deactivation of attachment needs.

Alexander and Anderson (1994) highlight how the four basic attachment styles can be expected to affect the therapeutic relationship as follows: (a) securely attached clients should face their discomforting challenges directly and consider the multiple factors and levels of analysis inherent in each situation. They acknowledge problems that need to be addressed but simultaneously appreciate the positive and good; (b) Preoccupied clients are hypersensitive to threat cues, have exaggerated negative affect, and respond impulsively to alleviate distress. Working with preoccupied clients thus involves helping them to separate intense affect from behavior and teaching them to self-soothe instead of engaging in "knee-jerk reactions." Because they perceive themselves as victims and as being helpless, it is difficult to help these clients to see that they have the power to control their own behaviors; (c) Fearful clients are likely to be socially withdrawn and may present as oppositional and resistant to treatment. These clients often react to self-disclosures and accompanying feelings of vulnerability by acting out or withdrawing. Thus, fearful clients may be treatable within normal psychotherapy as long as the goal is a recovery of reflective functioning and not the development of insight (Fonagy, 1998); (d) Dismissing clients who seek the help of a therapist, after disclosing their presenting problem, may begin to deny that anything is wrong. They are likely to describe their families in positive terms despite recounting memories of abuse and neglect, and they typically will interact with the therapist via intellectualizations.

By definition, dismissing clients have positive perceptions of themselves. Unlike those with secure attachments, however, these positive self-views among dismissing clients are likely to be manifestations of underlying defensive structures. This pattern has been proposed to become part of the internal working model as the defensive idealization of parents in childhood is transformed into a defensive idealization of self in adulthood (Cassidy & Kobak, 1988). Thus, what appears to be high self-esteem may overlay a fragile mask based on perfectionist attitudes (Mikulincer, 1995). Similarly, in our laboratory, we have found that dismissing research participants have levels of hope (Snyder, 2002) equal to that of secure individuals (Shorey & Snyder, 2001). Nevertheless, dismissing individuals do not appear to derive the positive mental health benefits normally associated with higher levels of hope. In this regard, their hope among dismissing persons appears to be based on perceptions of attaining goals in performance rather than social arenas. Dismissing clients thus are forced to maintain their perfectionist, performance-oriented attitudes in order to head off the possibility that others may discover their flaws and reject them. Maintaining this self-presentation in performance domains, however, probably enables these individuals to be very successful in those professional endeavors where a certain amount of interpersonal distance can be maintained (Connors, 1997).

Because their positive self-presentations may mask fragile underlying senses of self, dismissing persons may be susceptible to anger and hostility when their egos are threatened (Baumeister, Smart, & Boden, 1996; Horowitz, Rosenberg, & Bartholomew, 1993). Compared to those with other attachment styles, dismissing clients thus are not as likely to seek psychotherapy and, if they do seek treatment, are less likely to benefit from it (see Connors, 1997). For example, Dozier (1990) found that clients with greater avoidance (as assessed by the AAI) were less likely to seek treatment, were more prone to reject attempted interventions, and were less likely to conform to treatment requirements than were persons with more preoccupied styles. Indeed, the seeking of help would imply that the self is not perfect and threaten the ego. These individuals are likely to resist the process of therapy because they have been conditioned by a lifetime of experiences in avoiding attachment-related material—specifically the material commonly accessed in interpersonal approaches to psychotherapy. For this reason, and because dismissing people have difficulty in clearly describing other people, Horowitz et al. (1993) suggested that they are poor candidates for brief dynamic psychotherapy. Furthermore, the therapist's attempts to access information is likely to be problematic because dismissing persons appear to have impaired access to memories of loss, anxiety, and sadness. Memory retrieval may be blocked at a preconscious level and never reach this client's awareness (Mikulincer, 1995). As such, these clients require a great deal of patience in psychotherapy as the therapist works with the rigidity of their defensive style. Because they are likely to prefer short-term therapy, however, their core working models often may remain unchanged (Connors, 1997).

Clients' reports of the qualities of their early attachment bonds to parents have been associated with their subsequent ratings of therapeutic working alliances (Mallinckrodt, 1991; Mallinckrodt, Coble, & Gantt, 1995). This could be related to the fact that the clients' attachment styles influence how therapists interacted with them. For example, Hardy et al. (1999) found that therapists responded to persons with dismissing styles with more active interpretations, and to those with preoccupied styles with more accepting, holding strategies involving reflection. "This is in keeping with earlier findings by Hardy et al. (Hardy, Stiles, Barkham, & Startup, 1988), that over involved (preoccupied) clients pulled for more psychodynamic-interpersonal interventions, and under involved (dismissing) clients pulled for more cognitive–behavioral interventions" (Hardy et al., 1999, p. 51).[2]

Travis, Bliwise, Binder, and Horne-Moyer (2001) highlighted how there are distinct patterns of psychotherapy outcomes over the course of Time Limited Dynamic Psychotherapy for persons with varying attachment styles. They used trained raters to evaluate videotapes of clients' intake and termination interviews based on Bartholomew and Horowitz's four category model. Similar to the findings of other researchers (Dolan, 1992, as cited in Travis et al., 2001; Fonagy et al., 1996), Travis et al. (2001) found that posttreatment global assess-

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[2] We added the parenthetical material to this quotation for clarity.

ments of functioning (GAF) scores were highest for secure clients, lowest for preoccupied clients, and in-between for dismissing and fearful clients who did not differ from each other in GAF scores. Travis et al. (2001) also found that although the majority of insecure clients did not change to a secure style as had been expected, there was a significant change in attachment classification from insecure to secure from pretreatment (0 of 29 clients classified as secure) to posttreatment (7 of 29 clients classified as secure).

Although clients' attachment styles are implicated in the course of treatment, the clinicians' attachment styles also influence the quality of the relationships that they form with their clients (Dozier, Cue, & Barnett, 1994). In studying whether better treatment outcomes would be obtained for client and therapist dyads with similar attachment styles, Tyrell, Dozier, Teague, and Fallott (1999) found that more de-activating (of attachment; avoidant) clients with severe pathology had better outcomes (global quality of life, stronger therapeutic alliance, and higher therapists' ratings of client functioning) with therapists who were less deactivating. Similarly, clients who were less deactivating had better outcomes with therapists who were more deactivating. Clients in Tyrell et al.'s (1999) study, however, did not benefit from this pattern in terms of clients' reports of depression or time spent in psychiatric hospitalization. Thus, although therapy improved the quality of life for the affected individuals, it did not appear to influence the course of major psychiatric disorders.

Other researchers also have found that client-therapist dissimilarity related to attachment and intimacy resulted in improved treatment outcomes (Arizmendi, Beutler, Shanfield, Crago, & Hagaman, 1985; Berzins, 1977). Dozier et al. (1994) followed case managers and their clients with severe psychological disorders (e.g., *DSM–IV* diagnoses of schizophrenia and bipolar disorder) over a period of six months. All clients and case managers were administered the AAI, and therapists were interviewed monthly regarding their most recent face-to-face contacts with their clients. These interviews were coded for intervention depth, which Dozier et al. (1994) described as the degree to which case managers addressed clients emotional issues (discussing anger toward a rela-

tive = high intervention depth) as opposed to clients' pragmatic issues relating to daily living (i.e., receiving food stamps = low intervention depth). Dozier et al. (1994) also coded the degree to which case managers responded to clients' dependency needs. Case managers were rated as perceiving higher client dependency needs if the case manager perceived those needs as affecting intervention decisions.

Dozier et al.'s (1994) findings indicated that case managers who were more insecure responded in greater depth to clients who were more, as opposed to less, preoccupied. They also perceived preoccupied clients as having greater dependency needs than clients who were dismissing. In the case of both depth of therapist response and perception of dependency needs, there was a (nonsignificant) trend for secure therapists to respond in greater depth and perceive greater dependency in relation to clients who were less preoccupied and more dismissing. Thus, according to Dozier et al. (1994), therapists who were more secure were more responsive to the dependency needs of dismissing as opposed to preoccupied clients. This may have provided interpersonal experiences that contradicted clients' extant working models, thus facilitating growth in therapy.

Dozier et al. (1994) hypothesized that secure therapists had the ability to become aware of what the client was "pulling for" and provided a noncomplementary response. In contrast, more insecure therapists respond to the pull of preoccupied clients by responding more strongly to their pull to meet dependency needs, thus reinforcing the clients' working models and failing to provide a corrective experience. In a related vein, for dismissing clients, insecure therapists are likely to respond in less depth to dependency needs, be perceived as more superficial, and thus reinforce perceptions of others as being unavailable.

Conclusions

As a theory of life span development, psychopathology, and psychotherapy, attachment theory has a great deal to offer people (e.g., researcher, therapists and clients, and lay people) in understanding their own or others' motives, goals, and goal-attainment strategies. For example, by not considering the implications of attachment theory, clinical researchers may fail

to detect meaningful results relating to treatment outcomes. This is because failure to identify meaningful subgroups (i.e., attachment styles) within research samples has the potential to obfuscate otherwise significant findings—particularly when those subgroups relate differentially to the constructs or systems under investigation. Thus, the continued ignoring of individual differences in attachment may undermine future advances in psychotherapy outcome research.

Researchers may want to look at attachment groups within their samples particularly in studying dynamic systems wherein multiple variables reciprocally and iteratively influence each other. For example, each of the insecure styles may relate positively to depressive symptoms. The mechanisms for this effect, however, are likely to differ according to attachment styles even if the isolated outcome (in this case levels of depressive symptomology) does not. Identifying differential mechanisms of action then should inform the design of future interventions so that they can be specifically modified to maximize treatment outcomes for each of the attachment style groups.

Maximizing treatment outcomes also should be the goal of individual therapists. Therapists, similar to researchers, may apply ill-advised interventions if they fail to consider how their clients are likely to respond to treatments given the clients' specific attachment styles. Accordingly, an assessment of clients' attachment styles should be standard in client intakes or clinical assessment batteries. At a minimum, such an assessment could involve administering a paper and pencil measure such as Brennan et al.'s (1998) ECRS. Scoring instructions for the ECRS can be used to derive a primary attachment classification using a standard statistical package such as SSPS. Alternately, hand scoring the instrument could allow the therapist to examine the clients' relative levels of attachment anxiety and avoidance to derive an attachment conceptualization. Although we advocate such an assessment, we also believe that therapists should gain a deep enough understanding of attachment theory and dynamics so as to be able to conceptualize their clients' attachment constellations based upon the clients' presentations (content and coherence of discourse) in session. Adult attachment interview training would provide therapists with this skill, but we do not believe that therapists need to go to such ends. Rather, therapists should be able acquire this skill set from studying the wealth of attachment theory and research highlighted in this article and available more widely in the clinical and social psychology literature.

A study of the attachment literature also should facilitate therapists having accurate perceptions of their own attachment styles. Lacking such insight, therapists may fail to consider how their attachment styles influence their choices of interventions. Given that attachment styles influence how therapists perceive and interact with their various clients, such understandings also should help therapists consciously choose how to respond to clients as opposed to giving the clients what they are pulling for as suggested by Dozier et al. (1994).

We believe that the formal training of therapists should involve didactic classes on developmental psychology generally and attachment theory specifically. In this respect, it would be beneficial for clinical psychologists to avail themselves of the attachment research generated not only within the clinical domain but also from that generated within social psychology. Attachment theory already has had a widespread and accelerating impact in the field of psychology over the last decades of the 20th century. Given the theory's widespread applicability across schools of thought within psychology (i.e., clinical, social and personality, cognitive), we believe that the time has come for scholars and researchers to embrace the totality of this literature and bring about a more cohesive integration in attachment conceptualizations so that even more applied psychologists can make productive use of attachment principles as we move into the 21st century.

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