Attachment style or organization is a concept that derives from John Bowlby's attachment theory and refers to a person's characteristic ways of relating to intimate caregiving and receiving relationships, particularly with one's parents, children, and romantic partners. From an attachment perspective, these individuals are called attachment figures. The concept of attachment style involves one's confidence in the availability of the attachment figure so as to use that person as a secure base from which the individual can freely explore the world when not in distress, as well as the use of this attachment figure as a safe haven from which the individual seeks support, protection, and comfort in times of distress. Exploration of the world includes not only the physical world but also the examination of relationships with other people and the capacity for reflection on one's internal experience.

From its inception, John Bowlby (1982) conceptualized attachment theory as guiding clinical practice. Consistent with this idea, there has been increased interest in the application of an attachment theory perspective to psychotherapy (see Berant & Obegi, 2009; Levy & Kelly, 2009, for reviews). Bowlby not only suggested that the psychotherapist can become an attachment figure for the client, but he also thought it was important for the therapist to become a reliable and trustworthy companion in the patient's exploration of his or her experiences. According to Bowlby (1988), secure attachment behaviors in psychotherapy include the use of the therapist as a secure base from which the individual can freely reflect on his or her experience, reflect on the possible contents of the minds of significant others, and explore the possibility of trying new experiences and engaging in novel behaviors. Additionally, Bowlby discussed patients turning to the therapist as a safe haven for comfort and support in times of distress. A number of clinical theorists have elaborated upon Bowlby's ideas about the function of attachment within the therapeutic relationship (e.g., Farber, Lippert, & Nevs, 1995; Farber & Metzger, 2009; Obegi, 2008). The association between adult attachment and psychotherapy has been conceptualized and examined both with attachment as an outcome variable and attachment as a moderator of treatment outcome. Early findings from this body of research suggest that patient attachment status may be relevant to the course and outcome of psychotherapy and may also change as a result of psychotherapy. A recent review of this literature (Berant & Obegi, 2009) concluded that securely attached clients tend to benefit more from psychotherapy than
insecurely attached clients. However, the findings across these studies have been variable, with some studies suggesting that securely attached clients may not necessarily show more improvement in treatment compared with insecurely attached clients (Czyzewska et al., 2002; Poragy et al., 1996). In addition, the strength of the relation between attachment security and treatment outcome remains unclear.

This chapter will focus on what is known about the relation between clients' attachment styles and their success in psychotherapy. First, we will review definitions and measurement of attachment and provide clinical examples of attachment patterns in psychotherapy. Second, in order to draw an overall conclusion about the relation between attachment and treatment outcome, we will present an original meta-analysis of the research on the association between clients' pretreatment attachment style/organization and psychotherapy outcome. We conclude with limitations of the extant research and therapeutic practices based on the meta-analytic findings.

**Definitions and Measures**

In developing attachment theory, John Bowlby turned to a combination of scientific disciplines, including psychoanalysis, ethology, cognitive psychology, and developmental psychology, which provided an array of concepts that could explain affective bonding between infants and their caregivers. Bowlby's theory concerned both the short-term effects of this relationship for a sense of felt security and affect regulation and the long-term effects of early attachment experiences on personality development, relationship functioning, and psychopathology. He conceptualized human motivation in terms of behavioral systems, a concept borrowed from ethology, and noted that attachment-related behavior in infancy (e.g., clinging, crying, smiling, monitoring caregivers, and developing a preference for a few reliable attachment figures) is part of a functional biological system that increases the likelihood of protection from dangers and predation, comfort during times of stress, and social learning. In fact, the fundamental survival gain of attachment lies not only in eliciting a protective caregiver response, but also in the experience of psychological containment: of aversive affect states required for the development of a coherent and symbolizing self (Poragy, 1999).

The caregiver's reliable and sensitive provision of loving care is believed to result in what Bowlby called a secure bond between the infant and the caregiver. This attachment security is conceptualized as deriving from repeated transactions with primary caregivers, through which the infant is believed to form internal working models (IWMs) of attachment relationships. These IWMs include expectations, beliefs, emotional appraisals, and rules for processing or excluding information. They can be partly conscious and partly unconscious and need not be completely consistent or coherent. IWMs are continually elaborated; with development, they organize personality and subsequently shape thoughts, feelings, and behaviors in future relationships. Thus, differences in caregiver behavior result in differences in infants' IWMs, which in turn are the basis for individual differences in the degree to which relationships are characterized by security.

Based on Bowlby's attachment theory, Ainsworth and her colleagues (Ainsworth et al., 1978) developed a laboratory method called the Strange Situation in order to evaluate individual differences in attachment security. The Strange Situation involves a series of short laboratory episodes staged in a playroom through which the infant, the caregiver, and a stranger interact in a comfortable setting and the behaviors of the infant are observed. Ainsworth and colleagues paid special attention to the infant's behavior upon reunion with the caregiver after separation. Ainsworth (Ainsworth et al., 1978) identified three distinct patterns or styles of attachment that have since been termed secure (63% of the dyads tested), anxious-resistant or ambivalent (16%), and avoidant (21%).

In the Strange Situation, secure infants can find the brief separation from the caregiver and the entrance of the stranger to be upsetting, but they approach the caregiver upon his or her return for support, calm quickly upon the caregiver's return, are easily soothed by the caregiver's presence, and go back to exploration without fuss. In contrast, anxious-resistant infants tend to become extremely distressed upon the caregiver's departure, and they ambivalently approach the caregiver for attention and comfort upon the caregiver's return. They are clingy and dependent, often crying, but they also seem angry and resist the caregiver's efforts to soothe them. Avoidantly attached infants frequently act unfazed or unaware of the caregiver's departure and often avoid the caregiver upon reunion. Sometimes, these infants appear shut down and depressed, and at other times, indifferent and overinvested in play (although the play has a rote quality rather than a rich symbolic quality). Despite their outward appearance of calmness and unconcern, research has shown that avoidant infants are quite distressed in terms of physiological responding, similar to the anxious-resistant babies (Sroufe & Waters, 1977).

Despite the obvious resemblance of these patterns to temperament types (Kagan, 1998), and consistent with Bowlby's hypotheses, these attachment behaviors in the Strange Situation experiment are not simply a result of infant temperament (Belsky, Fish, & Isabella, 1991; see Levy, 2005; Vaughn & Bost, 1999, for reviews). Temperament may affect the manner in which attachment security is expressed, but temperament does not affect the security of the attachment itself (Belsky & Rovine, 1987). For example, research has shown that both behaviorally inhibited and temperamentally fearful infants are frequently securely attached and engage in both secure-base and safe-haven behaviors (e.g., Gunnar et al., 1996; Stevenson-Hinde & Marshall, 1999). More importantly, Ainsworth's original work has been replicated and extended in hundreds of studies with thousands of infants and toddlers (see review by Fraley, 2002). Studies have found strong evidence for the influence of attachment patterns on later adaptation as well as remarkable continuity in attachment patterns over time.

A growing body of research (e.g., Grossmann, Grossmann, & Waters, 2005; Waters et al., 2000) examining attachment continuity suggests that patterns of attachment are both relatively stable over long periods of time and subject to change, influenced by a variety of factors including ongoing relationships with family members, new romantic relationships, traumatic life events, and possibly psychopathology (Fraley, 2002; Ricks, 1985; Shaver, Hazan, & Bradshaw, 1988). These findings are consistent with Bowlby's (1982) idea that attachment theory was not limited to infant–parent relationships. He contended that the attachment system remains active throughout the life span, from the cradle to the grave.

Stemming from Bowlby's contention that the attachment system remains active throughout the life span, various investigators in the mid-1980s began to apply the tenets of attachment theory to the study of adult behavior and personality. Because these investigators worked independently, they often used slightly different terms for similar constructs or focused on
insecurely attached clients. However, the findings across these studies have been variable, with some studies suggesting that securely attached clients may not necessarily show more improvement in treatment compared with insecurely attached clients (Cryanowski et al., 2002; Foragyi et al., 1996). In addition, the strength of the relation between attachment security and treatment outcome remains unclear.

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different aspects of Bowlby and Ainsworth's writings.

Mary Main and her colleagues developed the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985; Main, Kaplan, & Cassidy, 1985), a 1-hour attach-
ment history interview, noting that features in interviews with parents reliably predicted the Strange Situation behavior of their children. The interview inquires into "descrip-
tions of early relationships and attachment and adult personality" by probing for both specific corroborative and contradictory memories of parents and the relationship
with parents (Main et al., 1985, p. 98).

Three major patterns of adult attachment were initially identified: secure/autonomous, dismissing, and preoccupied/preoccupied. More recently, two additional categories have been identified: unresolved and cannot classify. The first three categories parallel the attachment classifications originally identified in childhood of secure, avoidant, and anxious-resistant (Ainsworth, Blehar, Waters, & Wall, 1978), and the unresolved classification parallels a pattern Main later described in infants that she called disorganized/disoriented (Main & Solomon, 1986).

A number of studies found that AAI clas-
sifications based on individuals' reports of interactions with their own parents could predict their children's Strange Situation classifications (see van Ijzendoorn, 1995, for a review).

A 160-item Adult Attachment Q-set was derived from the AAI scoring system and has been applied to AAI transcripts (Kobak et al., 1993). This system identifies secure, preoccupied, and dismissing categories based on ratings of two dimensions: security vs. anxiety and deactivation vs. hypervi-
sion. Hypervisionary emotional strategies are typical of preoccupied individuals, whereas deactivating strategies are typical of dismissing individuals. Scores are com-
pared to a criterion or "ideal" prototype
sort in order to identify the three organized
attachment categories. One notable disad-
vantage of the Q-set is that there is no
rating for a disorganized attachment dimen-
sion, nor can it identify the cannot classify
category.

In contrast to Main's focus on relations-
ships with parents, Hazan and Shaver (Hazar & Shaver, 1987, 1990; Shaver, Hazan, & Bradshaw, 1986), from a social-
psychological perspective, extrapolated the childhood attachment paradigm to study attachment in adulthood by conceptualizing romantic love as an attachment process. They translated Ainsworth's secure, avoidant, and anxious-ambivalent attachment pat-
terns into a paper-and-pencil prototyped-
matching measure of adult attachment styles (preferring the term anxious-ambivalent to anxious-resistant). Several other researchers have altered and extended the original Hazan and Shaver measure by breaking out the sentences in the prototypes into separate items. Factor analyses of these multi-item measures found a three-factor solution (Shaver, 1990) as well as a two-factor solution (Shaver & Collins, 1988) at self-report measure. The interview measure, initially referred to as the Bartholomew Attachment Interview (BAI) and later the Family Attachment Interview (FAI; Bartholomew & Horowitz, 1991), covers both relationships with parents (in line with the AAI) and relationships with close friends and romantic partners (in line with Hazan and Shaver's work).

In an effort to develop a more definitive measure of adult attachment and respond to the proliferation of attachment measures, Brennan, Clark and Shaver (1998) created the Experiences in Close Relationships (ECR) scale, which was derived from a factor analysis of 82 items extracted from a thorough literature search of measures used in and developed for previous attachment research. The ECR factor structure was consistent with Bartholomew and Horowitz's measure but showed stronger relations with other relevant constructs. Two short forms of the ECR have also been published (Fralea, Waller, & Brennan, 2000; Wei et al., 2007), with both highly related to the original ECR.

**Measures Used in Studies in Our Meta-Analysis**

Because research groups have approached the conceptualization and assessment of adult attachment patterns with emphasis on different aspects of Bowlby's writings, researchers have often identified slightly different patterns or used different names for the same dimensions. The measures described below are those used in the stud-
ies included in our meta-analysis.

**Adult Attachment Prototype Rating (AAPR; Filikonis, 1988)** is a set of 88 items on which an interviewer rates an individu-
ally's attachment style. The rating system focuses on two dimensions, each with a number of faces. On the excessive depen-
dency dimension, which corresponds to attachment anxiety, responders are com-
pared to three prototypes: excessive depend-
dency, borderline features, and compulsive caregiving. The prototypes on the excessive autonomy dimension, which corresponds to attachment avoidance, are defensive se-
paration, antisocial features, and obsessive-
compulsive features. A secure prototype was later added to the system (Strauss, Lobo-Drost, & Filikonis, 1999).

**Adult Attachment Scale (AAS; Collins & Read, 1990)** is a self-report instrument.
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In contrast to Main's focus on relationships with parents, Hazan and Shaver (Hazan & Shaver, 1987, 1990; Shaver, Hazan, & Brashad, 1988), from a social-psychological perspective, extrapolated the childhood attachment paradigm to study attachment in adulthood by conceptualizing romantic love as an attachment process. They translated Ainsworth's secure, avoidant, and anxious-ambivalent attachment patterns into a paper-and-pencil prototypematching measure of adult attachment styles (preferring the term anxious-ambivalent to anxious-resistant). Several other researchers have altered and extended the original Hazan and Shaver measure by breaking out the sentences in the prototypes into separate items. Factor analyses of these multi-item measures found a three-factor solution (desire for closeness, comfort with dependency, and anxiety about abandonment; Collins & Read, 1990) as well as a two-factor solution (desire for closeness and anxiety about abandonment; Simpson, 1990).

A number of empirical studies using Hazan and Shaver's (1987) measure or derivative measures of adult attachment have found that the distribution of adult attachment styles is similar to those found for infants. Approximately 55% of individuals are classified as secure, 25% as avoidant, and 20% as anxious (see reviews by Shaver & Clark, 1994, and Shaver & Hazan, 1993).

In an important development, Bartholomew (1990; Bartholomew & Horowitz, 1991) revised Hazan and Shaver's three-category classification scheme, proposing a four-category model that differentiated between two types of avoidant styles—fearful and dismissing. Bartholomew's key insight was an incongruence between Main's (Main & Goldwyn, 1996) and Hazan and Shaver's conceptions of avoidance. Main's prototype of the adult avoidant style (assessed in the context of parenting) is more defensive, denial oriented, and overly unemotional than Hazan and Shaver's avoidant romantic attachment prototype, which seems more vulnerable, conscious of emotional pain, and "fearful." Thus, Main's avoidant style is predominantly dismissive, whereas Hazan and Shaver's avoidant style is predominantly fearful. Consistent with Bowlby's theory, Bartholomew's four categories could be arrayed in a two-dimensional space, with one dimension being model of self (positive vs. negative) and the other being model of others (positive vs. negative). For secure individuals, models of self and others are both generally positive. For preoccupied or anxious-ambivalent individuals, the model of others is positive (i.e., relationships are attractive), but the model of self is not. For dismissing individuals, the reverse is true: the somewhat defensively maintained model of self is positive, whereas the model of others is not (i.e., intimacy in relationships is regarded with caution or avoided). Fearful individuals have relatively negative models of both self and others. Bartholomew also developed an interview measure of attachment along with her self-report measure. The interview measure, initially referred to as the Bartholomew Attachment Interview (BAI) and later the Family Attachment Interview (FAI; Bartholomew & Horowitz, 1991), covers both relationships with parents (in line with the AAI) and relationships with close friends and romantic partners (in line with Shaver and Hazan's work).

In an effort to develop a more definitive measure of adult attachment and respond to the proliferation of attachment measures, Brennan, Clark and Shaver (1998) created the Experiences in Close Relationships (ECR) scale, which was derived from a factor analysis of 60 attachment constructs representing 482 items extracted from a thorough literature search of measures used in and developed for previous attachment research. The ECR factor structure was consistent with Bartholomew and Horowitz's measure but showed stronger relations with other relevant constructs. Two short forms of the ECR have also been published (Fraley, Waller, & Brennan, 2000; Wei et al., 2007), with both highly related to the original ECR.

Measures Used in Studies in Our Meta-Analysis

Because research groups have approached the conceptualization and assessment of adult attachment patterns with emphasis on different aspects of Bowlby's writings, researchers have often identified slightly different patterns or used different names for the same dimensions. The measures described below are those used in the studies included in our meta-analysis.

Adult Attachment Prototype Rating (AAPR; Pilkonis, 1988) is a set of 88 items on which an interviewer rates an individual's attachment style. The rating system focuses on two dimensions, each with a number of faces. On the excessive dependency dimension, which corresponds to attachment anxiety, responders are compared to three prototypes: excessive dependency, borderline features, and compulsive caregiving. The prototypes on the excessive autonomy dimension, which corresponds to attachment avoidance, are defensive separation, antisocial features, and obsessive-compulsive features. A secure prototype was later added to the system (Strauss, Lobo-Drost, & Pilkonis, 1999).

Adult Attachment Scale (AAS; Collins & Read, 1990) is a self-report instrument
developed by breaking Hazel and Shaver's (1987) prototype statements into 21 items. The number of items in the AAS was later shortened to 18 (Collins, 1996). Individuals rate these statements on a 5-point, Likert-type scale (1 = not at all characteristic; 5 = very characteristic). The subscales include comfort with closeness and intimacy (Close), comfort depending on others (Depend), and anxiety about abandonment (Anxiety). Responders can be categorized as follows: those with high Close and Depend scores and low Anxiety scores are Secure, those with high Anxiety scores and moderate Close and Depend scores are Anxious, and those with low scores on all three subscales are Avoidant. There is strong evidence throughout the literature for the scales' reliability and validity (Ravitz, Maunder, Hunter, Shanksjiya, & Lancer, 2010).

Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) is a self-report questionnaire based on Bartholomew's (1990) four-category model of attachment. The RQ consists of four paragraphs describing each of the attachment prototypes—secure, fearful, preoccupied, and dismissing. Participants rate how well each corresponds to their romantic relationship pattern, where 1 = not at all like me and 7 = very much like me. Participants then select the one paragraph that best describes them.

Relationship Style Questionnaire (RSQ; Bartholomew & Horowitz, 1991) contains 30 short statements drawn from three other attachment measures. Participants rate each question on a 5-point Likert scale to indicate the extent to which each statement best describes their characteristic style in close relationships. Five statements contribute to the secure and dismissing attachment patterns and four statements contribute to the fearful and preoccupied attachment patterns. Scores for each attachment pattern are calculated by taking the mean of the four or five items representing each attachment prototype. Two underlying dimensions can be derived either by conducting a factor analysis of the items or by using the scores from the four prototype items to create linear combinations representing the self- and other-model attachment dimensions.

Family Attachment Interview (FAI; Bartholomew & Horowitz, 1991) is a semi-structured interview designed to assess adult attachment styles based on information about parents. The FAI scoring system can be used with information generated from the AAI. The FAI scoring is similar to the AAI in that attachment ratings are based on content of reports as well as reporting style (e.g., defensive strategies that emerge during the interview, coherence of the report). However, the FAI codes people on four attachment styles (secure, fearful, preoccupied, and dismissing) rather than categorizing people into the AAI categories. The interviews are coded for each attachment pattern on a 9-point scale (1 = no evidence of characteristics of the prototype; 9 = near perfect fit with the prototype).

Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hannah, 1994) is a 40-item self-report questionnaire rated on a 6-point, Likert-type scale. It includes subscales to measure Self-Confidence, Discomfort with Closeness, Need for Approval, Preoccupation, and Relationships as Secondary. The instrument has adequate reliability and has been found to converge with other attachment measures and to have predictive validity (Ravitz et al., 2010).

Reciprocal Attachment Questionnaire (RAQ; West & Sheldron-Keller, 1994) is a 43-item, 5-point, Likert-type self-report questionnaire designed to assess nine dimensions of adult attachment patterns with significant others. Four pattern subscales—Compulsive Self-Reliance, Compulsive Care-Giving, Compulsive Care-Seeking, and Angry Withdrawal—are assessed dysfunctional patterns of adult attachment. There are also five attachment dimension subscales: Separation Protest, Fearful Loss, Proximity Seeking, and Use and Perceived Availability of the attachment figure. The validity and reliability of the RAQ have been established in both clinical and nonclinical adult populations (West & Sheldon-Keller, 1994).

Avoidant Attachment Questionnaire (AAQ; West & Sheldon-Keller, 1994) is a 22-item, 5-point, Likert self-report questionnaire developed alongside the RAQ as an alternative for individuals who deny having a primary attachment figure. The questionnaire assesses four subscales: Maintains Distance in Relationships, High Priority on Self-Sufficiency, Attachment Relationship is a Threat to Security, and Desire for Close Affectional Bonds. There is a relative dearth of evidence on its reliability and validity, probably due to the infrequency of its use (Ravitz et al., 2010).

Experiences in Close Relationships (ECR; Brennan et al., 1998) is a 36-item, self-report questionnaire that assesses attachment security in close relationships by tapping two basic dimensions of attachment organization: anxiety and avoidance. These two dimensions define most measures of adult attachment style (Brennan et al., 1998) and parallel those identified by Ainsworth et al. (1978) as underlying patterns of behavior in the Strange Situation. Participants rate the extent to which each item is descriptive of their feelings in close relationships on a 7-point scale (1 = not at all to 7 = very much). Eighteen items assess attachment anxiety and 18 assess attachment avoidance. The reliability and validity of the scales have been demonstrated (Brennan et al., 1998).

Clinical Examples
In general, patients with secure attachment styles have been found to be more collaborative, receptive, and better able to utilize treatment. In contrast, those with dismissive styles have been found to be less engaged in treatment. Those with preoccupied states of mind with regard to attachment have been found to present as more needy in therapy but not necessarily compliant with treatment (e.g., Dozier, 1990; Rigg, Jacobovits, & Hazel, 2002).

Secure Attachment
Given that secure individuals are more open to exploring their surroundings and relationships, it is not surprising that evidence suggests that persons with autonomous states of mind tend to be open, engaged, collaborative, compliant, committed, and proactive in treatment (Dozier, 1990; Korfman, Adam, Ogawa, & Egeland, 1997; Rigg et al., 2002). Although these individuals may enter treatment distressed, they tend to be trusting of therapists. Most importantly, they tend to be able to integrate and utilize their therapists' comments. Additionally, anecdotal evidence suggests that they can show more gratitude toward the therapist for providing treatment.

Preoccupied Attachment
Because preoccupied individuals can be so interpersonally engaged, they often initially appear to be easier to treat. Preoccupied individuals are often so distressed and interpersonally oriented that they are eager to discuss their worries and relationship difficulties as well as their own role in these problems (Dozier, 1990). Because the chaotic and contradictory representations of self and others of individuals classified as preoccupied are so rich, they may be more readily and vividly mentalized or represented by the therapist. However, both clinical and empirical evidence suggests
developed by breaking Hazan and Shaver’s (1987) prototype statements into 21 items. The number of items in the AAS was later shortened to 18 (Collins, 1996). Individuals rate these statements on a 5-point, Likert-type scale (1 = not at all characteristic; 5 = very characteristic). The subscales include comfort with closeness and intimacy (Close), comfort depending on others (Depend), and anxiety about abandonment (Anxiety). Responders can be categorized as follows: those with high Close and Depend scores and low Anxiety scores are Secure, those with high Anxiety scores and moderate Close and Depend scores are Ambivalent, and those with low scores on all three subscales are Avoidant. There is strong evidence throughout the literature for the scales’ reliability and validity (Ravitz, Maunder, Hunter, Shanfield, & Lancer, 2010).

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**Relationship Style Questionnaire (RSQ):** Bartholomew & Horowitz, 1991 contains 30 short statements drawn from three other attachment measures. Participants rate each question on a 5-point Likert scale to indicate the extent to which each statement best describes their relationship style in close relationships. Five statements contribute to the secure and dismissing attachment patterns and four statements contribute to the fearful and preoccupied attachment patterns. Scores for each attachment pattern are calculated by taking the mean of the four or five items representing each attachment prototype. Two underlying dimensions can be derived either by conducting a factor analysis of the items or by using the scores from the four prototype items to create linear combinations representing the self- and other-model attachment dimensions.

**Family Attachment Interview (FAI):** Bartholomew & Horowitz, 1991 is a semi-structured interview designed to assess adult attachment styles based on information about parents. The probes used in the interview are remarkably similar to those used in the Adult Attachment Interview, and as such, the FAI scoring system can be used with information generated from the AAI. The FAI scoring is similar to the AAI in that attachment ratings are based on content of reports as well as reporting style (e.g., defensive strategies that emerge during the interview, coercion of the report). However, the FAI codes people on four attachment styles (secure, fearful, preoccupied, and dismissing) rather than categorizing people into the AAI categories. The interviews are coded for each attachment pattern on a 9-point scale (1 = no evidence of characteristics of the prototype; 9 = near perfect fit with the prototype).

**Attachment Style Questionnaire (ASQ):** Feeney, Noller, & Hannah, 1994 is a 40-item self-report questionnaire rated on a 7-point Likert-type scale. It includes subscales to measure Self-Confidence, Discomfort with Closeness, Need for Approval, Preoccupation, and Relationships as Secondary. The instrument has adequate reliability and has been found to converge with other attachment measures and to have predictive validity (Ravitz et al., 2010).

**Reciprocal Attachment Questionnaire (RAQ):** West & Sheldron-Keller, 1994 is a 43-item, 7-point, Likert-type self-report questionnaire designed to assess nine dimensions of adult attachment patterns with significant others. Four pattern subscales—Compulsive Self-Reliance, Compulsive Care-Giving, Compulsive Care-Seeking, and Anger Withdrawal—assess dysfunctional patterns of adult attachment. There are also five attachment dimension subscales: Separation Protest, Fear of Loss, Proximity Seeking, and Use and Perceived Availability of the attachment figure. The validity and reliability of the RAQ have been established in both clinical and nonclinical adult populations (West & Sheldron-Keller, 1994).

**Avoidant Attachment Questionnaire (AAQ):** West & Sheldron-Keller, 1994 is a 22-item, 5-point, Likert self-report questionnaire developed alongside the RAQ as an alternative for individuals who deny having a primary attachment figure. The questionnaire assesses four subscales: Maintains Distance in Relationships, High Priority on Self-Sufficiency, Attachment Relationship is a Threat to Security, and Desire for Close Attachments. There is a relative dearth of evidence on its reliability and validity, probably due to the infrequency of its use (Ravitz et al., 2010).

**Experiences in Close Relationships (ECR; Brennan et al., 1998)** is a 36-item, self-report questionnaire that assesses attachment security in close relationships by tapping two basic dimensions of attachment organization: anxiety and avoidance. These two dimensions machine most measures of adult attachment style (Brennan et al., 1998) and parallel those identified by Ainsworth et al. (1978) as underlying patterns of behavior in the Strange Situation. Participants rate the extent to which each item is descriptive of their feelings in close relationships on a 7-point scale (1 = not at all to 7 = very much). Eighteen items assess attachment anxiety and 18 assess attachment avoidance. The reliability and validity of the scales have been demonstrated (Brennan et al., 1998).

**Clinical Examples**

In general, patients with secure attachment styles have been found to be more collaborative, receptive, and better able to utilize treatment. In contrast, those with dismissive styles have been found to be less engaged in treatment. Those with preoccupied states of mind with regard to attachment have been found to present as more needy in therapy but not necessarily compliant with treatment (e.g., Dozier, 1990; Riggs, Jacobovitz, & Hazen, 2002).

**Secure Attachment**

Given that secure individuals are more open to exploring their surroundings and relationships, it is not surprising that evidence suggests that persons with autonomous states of mind tend to be open, engaged, collaborative, compliant, committed, and proactive in treatment (Dozier, 1990; Korfmaner, Adam, Ogawa, & Egelund, 1997; Riggs et al., 2002). Although these individuals may enter treatment distressed, they tend to be trusting of therapists. Most importantly, they tend to be able to integrate and utilize their therapists’ comments. Additionally, anecdotal evidence suggests that they can show more gratitude toward the therapist for providing treatment.

**Preoccupied Attachment**

Because preoccupied individuals can be so interpersonally engaged, they often initially appear to be easier to treat. Preoccupied individuals are often extremely distressed and interpersonally oriented that they are eager to discuss their worries and relationship difficulties as well as their own role in these problems (Dozier, 1990). Because the chaotic and contradictory representations of self and others of individuals classified as preoccupied are so rich, they may be more readily and vividly mentalized or represented by the therapist. However, both clinical and empirical evidence suggests...
that these individuals may be difficult to treat. In a number of papers, Slade (1999, 2004) has written about the unique challenges inherent to working clinically with preoccupied individuals. She warns that “Progress is... hard won” (Slade, 1999, p. 588) and that therapists must be prepared for the “slow creation of structures for the modulation of affect” (Slade, 1999, p. 586). She contends that change occurs over a long period of time from the therapist's long-term emotional availability and tolerance for chaos.

Clients with preoccupied attachment organization tend to present themselves as needy but are not more compliant with treatment plans than dismissing individuals (Dozier, 1990). Those classified as preoccupied, as compared with those classified as dismissive, tend to show less improvement (Fonagy et al., 1996). It is hypothesized that the preoccupied patients are more difficult to treat because their representational systems are intricately linked with emotions that are well-developed and elaborated by entrenched preoccupation with difficult events in their lives. This is also expressed in terms of their certainty about mental states and motivations for others' behaviors.

In our own work, we have found a number of difficult aspects related to working with preoccupied individuals that can be first identified in the narratives of AAs. These include: (1) unmitigated certainty about mental states; (2) rapid vacillations or oscillations between contradictory mental states; (3) current anger and confusion about time and place; (4) self-blame and derogations. Each of these issues, alone or in combination, may leave the therapist feeling confused and overwhelmed.

The following vignette contains aspects of all four of these issues. The patient was an unmarried 35-year-old woman of Southeast Asian descent. Despite being very attractive and highly intelligent, with an Ivy League education, she found herself unable to date and maintain employment. This was mainly because, though she was emotionally needy, she could not get along with others due to frequent angry outbursts. Even at 35, she was highly dependent on her parents, particularly for financial support, but also for emotional support. Her parents were at their wits' end with her and felt she was wasting her life away. Although they were traditional and perceived psychotherapy as a corrupt endeavor practiced by charlatans, they were willing to pay for psychotherapy.

The patient's relationship with her parents was anchored in two equally uncomfortable extremes that led her to vacillate between wanting to live at home and submit to their will, and wanting to break away from their control and become independent and self-reliant. At times, she would plead with the therapist in a loud, pressured voice, “Dr. X, Dr. X, please, please tell me what to do! Should I try to work it out with my parents or should I just forget about them?” The patient rapidly flipped between desperately wanting to be close to her parents and feeling as if she could not live without them wanting to have nothing to do with them. In each of these stances, she would be adamant and inflexible about her position and then flip to the other. She would flip so quickly that when she was in one mental state she did not appear to recall the other mental state. However, when she would pose this question, both mental states were represented for a brief time.

In these moments the psychotherapist felt extremely pressured by the patient to provide her with an answer to her quandary. Any hesitation on the therapist's part was interpreted as withholding valuable information from the patient and was met with quick anger. The therapist felt backed into a corner with no good solution.

He did not feel he could simply give the patient advice. Besides, the solution was neither to submit to the parents nor to cut them off, but rather, to figure out how to have a mutually satisfying relationship with them. He also felt pressured because he realized that these moments where the patient had both sides of a conflict represented were rare and fleeting, and he wanted to make use of them, and yet, he was feeling pressured to answer a question that had no answer and would be both unsatisfying and infuriating to the patient.

Using his countertransference of being backed into a corner, the therapist commented to the patient that she must feel backed into a corner with no good option available. He continued by pointing out that if he told her to reconcile with her parents, he imagined that she might interpret this as if he felt she was wrong, they were right, and she should submit to their will and allow herself to be controlled by them. On the other hand, if he told her to resist their will, and leave them, she would feel as if the therapy was useless, and she would feel terribly abandoned by her parents and more dependent on the therapist. With both affective states acknowledged, validated in the patient, and tolerated by the therapist, the patient was able to refrain from her rapid oscillations long enough to have a productive discussion and develop a more integrated perspective on her situation vis-a-vis both her own and her parents' behaviors.

Dismissing Attachment

Dismissing patients are often resistant to treatment, have difficulty asking for help, and retreat from help when it is offered (Dozier, 1990). Indeed, dismissing patients often evoke countertransference feelings of being excluded from the patients' lives (Diamond et al., 1999, 2003). In our pilot study, a patient classified as dismissive came into session one morning and announced, to her therapist's surprise, that she was getting married that afternoon. Although she had known of her engagement, it had been many months since she had brought up any aspect of her upcoming marriage. Additionally, dismissing individuals often become more distressed and confused when confronted with emotional issues in therapy (Dozier, Lomax, Tyrell, & Lee, 2001). Another dismissive patient, when reflecting on her experience in therapy, stated:

He (the therapist) would start digging into things and find out why I was angry, and then I would realize something really made me mad, but I didn't want to be mad.

With my parents, for example, I didn't want to be angry at them.

Finally, therapists working with dismissive patients may be pulled into enactments, where they find themselves in a situation analogous to a "chase and dodge" sequence with mothers and infants (Beebe & Lachmann, 1988), which leaves the patient feeling intruded upon only to withdraw further. Conversely, those with dismissing attachment may effectively curtail the therapist's capacity to engage with, visualize, or evoke the individual's representational world, or identify with the patient.

"Unresolved for Trauma or Loss" Attachment

An individual can be classified as unresolved on the Adult Attachment Interview for either loss or trauma experiences. This classification is unique in that it is given to an individual in addition to one of the organized attachment patterns (i.e., secure, preoccupied, or dismissing) and can be either primary or secondary, depending on a number of factors. Clinical writers have suggested that it can be very difficult to treat those patients who are unresolved for trauma or loss on the AAI.

LEVY, ELLISON, SCOTT, BARNECKER
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LEVY, ELLISON, SCOTT, BERNSTEIN
In two studies it was found that between 32% and 60% of patients with borderline personality disorder (BPD) were classified as unresolved (Diamond et al., 2003; Levy et al., 2006). In a randomized clinical trial (Levy et al., 2006), we found a non-significant decrease from pretreatment to post-treatment in the number of patients classified as unresolved (32% vs. 22%). Unpublished data from this trial (Levy, Clarkin, & Kernberg, 2007) suggest that those BPD patients who were unresolved were more likely to drop out of treatment. However, in a small sample of women with childhood sexual and physical abuse-related posttraumatic stress disorder (PTSD), 62% of unresolved patients lost their unresolved status following treatment (Stovall-McClough & Cloitre, 2005).

**Meta-Analytic Review**

To characterize the relation between adult attachment and psychotherapy outcome, we conducted three separate meta-analyses. We hypothesized that attachment anxiety would be negatively related to outcome, that attachment avoidance would be negatively related to outcome, and that attachment security would be positively related to outcome. Because research on attachment is converging on the notion that the two dimensions of avoidance and attachment underlie adult attachment, we decided to focus on them instead of the individual attachment categories, which evidence more variability among assessment methods. In addition, we examined attachment security (which can be conceptualized as a blend of avoidance and anxiety dimensions) because it has often been the focus of psychotherapy research.

**Inclusion Criteria and Search Strategy**

Eligible studies were published reports of psychotherapy outcome in samples of treatment-seeking individuals. These studies were found first through articles reviewing the literature (e.g., Berant & Obeidi, 2009) and second through a series of PsycINFO searches. These searches, conducted in December 2009, used the intersections of the terms attachment, interperson style, relation style, or the name of an attachment measure with either therapy outcome, psychotherapy outcome, or outcome. The search initially returned 10,155 results. After foreign-language studies (531), dissertations (8), and studies that did not include treatment trials (944) were excluded, 168 articles remained. Many of these were irrelevant to the topic at hand; only studies that measured attachment and treatment outcome were included.

In order to be included in the meta-analyses, studies had to report statistics showing the relation between patients' pretreatment attachment security, anxiety, and/or avoidance to outcome posttreatment. In order to avoid confounding attachment with therapeutic alliance, reports were not included if the measure of attachment concerned client attachment to therapist. For many identified studies, statistics describing the relation between attachment and outcome were not directly available from the published report, in which cases the authors of the study were contacted via e-mail and asked to provide these statistics. The corresponding authors of 15 primary studies were contacted, of which 10 responded with suitable statistics. Our final pool of studies analyzed consisted of 14 studies, which contained 19 separate therapy samples with a combined N of 1,467. Table 19.1 lists the studies included in the meta-analysis along with relevant characteristics of their designs and samples.

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<th>$N$</th>
<th>% Female</th>
<th>Age (M)</th>
<th>Diagnosis</th>
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Notes: C = close, NT = non-target, T = therapist
Orientations: CB = cognitive-behavioral, D = dynamic, E = egoistic, T = trans
Diagnoses: BE = bipolar disorder, BD = bipolar disorder, C = close partner violence, G = personality disorder, MDD = major depressive disorder, PD = personality disorder, PDNOS = personality disorder not otherwise specified, PTSD = post-traumatic stress disorder
Attachment measures: AAPR = Adult Attachment styles Questionnaire, BARS = Bartholomew's close relationship scale, BCI = close relationship scale, ECR = experienced in close relationship scale, ECR-R = experienced in close relationship scale, ECR-RB = experienced in close relationships scale, ECR-RB-R = experienced in close relationships scale, ECR = experienced in close relationship scale, ECR-R = experienced in close relationships scale, ECR-RB = experienced in close relationships scale, ECR = experienced in close relationship scale, ECR-R = experienced in close relationships scale, ECR-RB = experienced in close relationships scale, ECR = experienced in close relation...
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<td>SCL-90-R</td>
<td>C</td>
</tr>
<tr>
<td>Sassi et al. (2007)</td>
<td>82</td>
<td>72.7</td>
<td>24.92</td>
<td>MDD</td>
<td>Vignettes</td>
<td>C</td>
<td>CB</td>
<td>14</td>
<td>BDI</td>
<td>C</td>
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<tr>
<td>Stalker et al. (2005)</td>
<td>114</td>
<td>100</td>
<td>40.6</td>
<td>PTSD</td>
<td>RAQ</td>
<td>C</td>
<td>D</td>
<td>6</td>
<td>SCL-90-R</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>100</td>
<td>40.6</td>
<td>PTSD</td>
<td>AAQ</td>
<td>C</td>
<td>D</td>
<td>6</td>
<td>MPSS-SR</td>
<td>C</td>
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<td>Strauss et al. (2006)</td>
<td>476</td>
<td>70</td>
<td>25.4</td>
<td>PD</td>
<td>AAPR</td>
<td>NT</td>
<td>D</td>
<td>10</td>
<td>SCL-90-R</td>
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<tr>
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<td>100</td>
<td>42.75</td>
<td>BED</td>
<td>ASQ</td>
<td>C</td>
<td>CB</td>
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<td>EDE</td>
<td>NT</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>100</td>
<td>42.75</td>
<td>BED</td>
<td>ASQ</td>
<td>C</td>
<td>D</td>
<td>16</td>
<td>EDE</td>
<td>NT</td>
</tr>
<tr>
<td>Travis et al. (2001)</td>
<td>59</td>
<td>59</td>
<td>41</td>
<td>Unspecified</td>
<td>BARS</td>
<td>NT</td>
<td>D</td>
<td>21</td>
<td>SCL-90-R</td>
<td>C</td>
</tr>
</tbody>
</table>

Notes: CB = cognitive-behavioral, D = dynamic, C = clinical, T = therapeutic
Orientations: CB = cognitive-behavioral, D = dynamic, C = clinical
Diagnoses: BPD = borderline personality disorder, MDD = major depressive disorder, PD = personality disorder, PDNOS = personality disorder not otherwise specified, PTSD = post-traumatic stress disorder
Attachment measures: AAPR = Adult Attachment Style Questionnaire, BARS = Bartholomew Anxiety Sensitivity Index
Abbreviations: EBI = Eating Disorder Inventory, HAM-A = Hamilton Anxiety Rating Scale, HAM-D = Hamilton Depression Rating Scale, HRSD = Hamilton Rating Scale for Depression, IIP = Inventory of Interpersonal Problems, MPSS-SR = Modified Parental Stress Scale-Short Form, SCL-90-R = Symptom Checklist-90 Revised, TSC-40 = Trauma Symptom Checklist-40, violence = subscale of the Conflict Tactics Scale.
a single sample was available from multiple research reports (Kirchmann et al., 2009; Strauss et al., 2006), so only one statistic was drawn from these reports. In other cases, separate statistics from multiple samples (for example, different treatment groups) were presented in the same publication (Levy et al., 2006; McBride, Atkinson, Quilty, & Bagby, 2006; Stalker, Gelbrey, & Harper, 2005; Tasa et al., 2006). For these studies, multiple effect size estimates were coded and treated as independent. Several studies provided statistics relating attachment to more than one outcome measure. These estimates were not considered independent because they were derived from the same sample and are thus likely to display substantial intercorrelation. Because we had no a priori reason to consider any one of these estimates representative of the study's "true" effect size, multiple effect size estimates from the same study were transformed to Z-scores (Hedges & Olkin, 1985), averaged together, and then back-transformed and treated as a single effect size.

**Study Coding**

Coding of the 14 studies was conducted by an advanced graduate student. Several patient characteristics were coded, including the proportion of the sample that was female, mean age of the sample, proportion of the sample that was White or Caucasian, and whether the primary diagnosis of the sample was an Axis I disorder (e.g., major depressive disorder) or an Axis II disorder (e.g., borderline personality disorder). The treatment characteristics coded included theoretical orientation (cognitive-behavioral or psychodynamic therapies) and length of treatment in weeks. Because the 19 samples included in the current study were offered 16 different types of psychotherapy, specific type of treatment was not formally coded. The operationalization of attachment was coded for its degree of approximation to attachment avoidance and attachment anxiety, and attachment measures were coded for rater (client-rated or observer-rated attachment). Finally, the following therapist variables were coded: mean years of experience, proportion of therapists in the study that was female, and student status.

**Effect Size Estimates**

The effect size statistic used for the current meta-analysis was the Pearson product-moment correlation coefficient ($r$) describing the relation between attachment variables and posttreatment outcome measures. In some cases, statistics relating attachment to outcome were other forms, such as means and standard deviations for different attachment groups on outcome measures, $t$-test of these values, or tables showing categories of outcome (e.g., how many individuals had achieved a certain symptom score) by attachment group. In these cases, statistics were transformed to $r$-values (using formulas presented in Lipsey & Wilson, 2001). Although it would be optimal to control for pretreatment correlations between attachment and symptom scales, this was not feasible because of inconsistent reporting among studies. Thus, all correlations used in the current analyses were zero-order correlations between preattachment measures and postattachment outcome.

The 14 primary studies differed in a number of ways that could be expected to impart a systematic bias onto effect size estimates. Thus, we made two adjustments to the statistics reported in the published studies. Both of these adjustments pertain to the operationalization of attachment and outcome. First, each study was adjusted to account for differences in operationalization of attachment. Measures of attachment vary widely, and the 14 studies sampled in the current analysis used 11 separate measures. The current analysis focuses on attachment security and the underlying attachment dimensions of avoidance and anxiety, and when measures provide an imperfect assessment of these constructs, the resulting effect size estimate is attenuated (Schmitt, Le, & Oh, 2009). Therefore, each study was corrected to account for how closely its attachment measure approximated these dimensions of attachment. In order to do this, each observed effect size was divided by the correlation of the attachment measure used in the study with the ECR or ECR-R, which probably measures attachment anxiety and attachment avoidance with the most fidelity. These correlation values were culled from the available literature. Figure 19.1 shows the correlations between attachment measures used in the primary studies with attachment anxiety and avoidance from the ECR.

A second correction was applied to account for artificial dichotomization of attachment dimensions or dimensional outcome constructs, which also attenuates effect size estimates (Schmitt et al., 2009), especially if the dichotomy produces an uneven split between groups (Lipsey & Wilson, 2001). For example, if outcome is recovery based on a dimensional symptom score below a certain cutoff, effect size estimates based on the proportion of individuals in recovered, and nonrecovered groups are distorted when compared with estimates from dimensionally measured variables.

![Fig. 19.1 Correlations of ECR Anxiety and Avoidance Scales with other self-report measures of adult attachment.](image-url)
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Hunter and Schmidt's (1990) correction to these values was thus applied. To ensure that more valid estimates contributed more to the overall mean than estimates for which these two artifact corrections were large, each effect size estimate was weighted not only by sample size but was also assigned a weight based on the size of the two artifact corrections (Hunter & Schmidt, 2004; Schmidt et al., 2009).

The influence of outliers is also a concern because the present study involved a small but heterogeneous sample of primary studies. Outliers were detected by means of the sample-adjusted meta-analytic deviance (SAMD; Huffcutt & Arthur, 1995) statistic, which takes into account the fact that smaller samples are more likely to produce deviant estimates of the population effect due to simple sampling error. The SAMD values associated with each of the primary studies were visually inspected in a scatter plot to determine whether any values were substantially more deviant than would be expected.

**Analyses**

The mean effect size was computed as a weighted average of each independent sample's correlation coefficient. The weights were composed of two coefficients: the sample size, so that each study's contribution to the overall mean would be inversely proportional to sampling error, and a multiplier based on the artifact corrections made to each effect size, so that studies that more nearly approximated the constructs of interest were weighted more heavily (Hunter & Schmidt, 2004; Schmidt et al., 2009). Random-effects modeling was used for each analysis, given the multiple sources of variability between studies and the resultant implausibility of fixed-effects models (for which one fixed population of studies is assumed).

Several likely predictors of the relationship between attachment and outcome were tested as moderators of this effect. These variables (summarized under "Study Coding") were designated a priori and related to variance at several different levels, including sample variables, treatment description, operationalization of attachment and therapist variables. Moderation analyses were conducted via weighted least squares regression in which each effect size estimate was assigned a weight based on inverse variance (Lipsey & Wilson, 2001). Fisher's Z transformation (Hedges & Olkin, 1985) was used for each effect size estimate before regression analyses were conducted because of the problematic standard error formulation associated with correlation coefficients (Lipsey & Wilson, 2001). Effect size estimates used in the regression analyses were the attenuated (uncorrected) values; in order to control for the effects of measure unreliability and artificial dichotomization, the multiplier values representing these artifacts were used as covariates in each regression analysis (Borenstein, Hedges, Higgins, & Rothstein, 2009). Regression used random-effects modeling estimated via iterative maximum likelihood estimation (Wilson, 2005).

**Results**

The mean weighted $r$ between attachment anxiety and psychotherapy outcome was $-0.224$ (Cohen's weighted $d = -0.460$). Outcomes were coded so that higher numbers reflected better outcome. Thus, higher attachment anxiety predicted worse outcome after therapy. The 80% credibility interval around this estimate ranged from $-0.58$ to $-0.291$ ($d = -0.320$ to $-0.608$). Because a random-effects model was used, this range refers not to the distribution of estimates of a single parameter ($r$ values), but to multiple population parameter (that is, $\phi$) values. Thus, 80% of the parameter values describing the relation between attachment and anxiety lie in this interval.

The mean weighted $r$ between attachment avoidance and treatment outcome was $-0.014$ ($d = -0.028$), with an 80% credibility interval of $-0.165$ to $0.168$ ($d = -0.335$ to $0.275$). This suggests that attachment avoidance had a negligible overall effect on outcomes in psychotherapy.

The mean weighted $r$ between attachment security and outcome was $0.182$ ($d = 0.370$), with an 80% credibility interval of $0.042$ to $0.321$ ($d = 0.084$ to $0.678$). Thus, higher attachment security predicted more favorable outcomes in psychotherapy. SAMD values were examined to check for the presence of outliers among the effect size estimates. No outliers could be identified among the primary studies' estimates of the relation between outcome and attachment anxiety, avoidance, or security. Therefore, all values were retained for further analyses.

**Moderators and Mediators**

For all three attachment dimensions, homogeneity of effect size estimates was tested by means of Hunter and Schmidt's (2004) 75% criterion, which estimates the amount of variance in effect sizes that is due to artifacts (such as imperfect validity or reliability of the measures used). If this value is more than 75% of the total variance, the authors suggest that a search for measureable moderators of the effect size may be unproductive because the remaining variance in effect sizes is comparatively small. This method was used because heterogeneity tests based on a null hypothesis of homogeneity (such as the Q statistic) would likely have little power given the small sample of studies in the current meta-analyses. In the current study, a substantial portion of the variance in the corrected effect size estimates was indeed artificial. The artifacts for which we corrected in the three meta-analyses accounted for 89%, 75%, and 82% of the variance in attachment-outcome effect sizes for anxiety, avoidance, and security, respectively. Thus, the effect sizes that were combined in each of our meta-analyses could be considered fairly homogeneous after artifactual sources of variance are accounted for. Nevertheless, an exploratory analysis of potential moderators was conducted.

Unfortunately, for a number of the coded variables, the effects of moderator variables could not be estimated because data about them were not available from the primary studies, or because there was not enough variance among the primary studies on the moderator variable. For two examples, the moderating influence of sample ethnicity and therapist level of experience could not be estimated due to insufficient data or variability.

No moderators were found to influence the size of the relation between either attachment avoidance or attachment anxiety and treatment outcome. However, two sample-level moderators did significantly influence the effect of attachment security on outcome. Both the proportion of females ($Z = 2.78, p < .01$) and the mean age ($Z = 2.02, p < .05$) of the patients exerted an effect, such that the more female and older the sample, the smaller the observed relation between security and outcome. We suspect that the effect of gender can be explained by one study (Cyranowski et al., 2002), which included only women and found the weakest relation between security and outcome. In fact, running the analysis without including this study completely erased the significant gender effect, with a regression coefficient of nearly zero. Nonetheless, there are gender differences in attachment (i.e., studies suggest that more men than women demonstrate insecure and dismissing attachment styles; Bartholomew & Horowitz, 1991; Levy, Blatt, & Shaver, 1998; Levy & Kelly, 2010) that could potentially influence...
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Additionally, client age emerged as a significant moderator, such that the positive relation between attachment security and outcome was attenuated in samples that were older on average. This finding may be explained by cross-sectional research showing that older adults are more likely to be securely attached, and less likely to be fearfully attached, than younger adults (Diehl, Ellick, Bourbeau, & Labouvie-Vief, 1998; Mickelson, Kessler, & Shaver, 1997). If this is a developmental, rather than cohort-based, effect, this difference suggests that some preoccupied individuals become secure (perhaps by finding or creating an intimate relationship with a trustworthy other) as they age. Thus, it may be that there is a weaker relation between attachment and therapy outcome among older adults because there is less variability in their characteristic attachment styles.

Theoretical orientation was not a significant moderator of the effect sizes for anxiety or avoidance in our meta-analyses. However, our null findings for therapeutic orientation as a moderator may be due to heterogeneity in the treatments that were grouped together into the same category. For example, in order to have enough studies of the same therapeutic orientation to combine in a meta-analysis, it was necessary to combine interpersonal with psychodynamic treatments, individual with group therapies, long-term and short-term treatments, and inpatient with outpatient treatments, although these are really quite different experiences of psychotherapy.

Nevertheless, the few studies that have examined the interaction between client attachment and treatment type in the prediction of outcome do suggest that clients respond differentially to different treatments based on their attachment style (Bakermans-Kranenburg, Juffer, & van IJzendoorn, 1998; McBride et al., 2006; Tasci et al., 2006). There is preliminary evidence that dismissive/avoidant clients may benefit more from treatments that focus on cognitions and behaviors rather than emotionality and relationships, at least in short-term psychotherapy. For instance, one study examined two versions of a short-term treatment for promoting maternal sensitivity and found that insecure preoccupied mothers benefited more from an intervention that included both video feedback and discussion of childhood attachment experiences, whereas dismissive mothers benefited more from video feedback without such discussions (Bakermans-Kranenburg et al., 1998). In addition, a study examining short-term treatments for depression demonstrated that attachment avoidance was associated with more improvement with short-term cognitive-behavioral therapy (CBT) and less improvement with short-term interpersonal psychotherapy (IPT); (McBride et al., 2006). Such findings parallel the early evidence that interpersonal and insight-oriented therapies tend to be slightly more effective among patients with internalizing coping styles, whereas symptom-focused and skill-building therapies tend to be more effective among externalizing patients (Beutler, Harwood, Kimpas, Verdirame, & Blau, this volume, Chapter 17).

Limitations of the Research
There are still relatively few empirical studies that have examined how client attachment influences psychotherapy outcome. In addition, there are few investigations regarding matching patients to treatments or therapists based on attachment patterns; so few, in fact, that we could not submit them to a meta-analysis.

Furthermore, in order to produce findings that are comparable to one another and that can be combined to yield meaningful and clinically relevant conclusions, it is important for investigators to use measures of attachment that are well validated and commonly used in the literature. Some studies have used attachment measures that do not correlate well with other measures of attachment, and that do not appear to converge with underlying dimensions of adult attachment (anxiety and avoidance).

Another limitation of our meta-analyses is that we could not control for the correlations between attachment and pretreatment functioning. The interpretation of posttreatment symptoms as outcome is potentially problematic because it does not consider baseline levels or actual change in symptoms as a function of treatment. Hence, any association between attachment and pretreatment functioning may, to some degree, reflect the relation between attachment and psychopathology. Although a number of studies that did control for the influence of pretreatment functioning on the association between attachment security and outcome have reported findings that are consistent with ours (e.g., Meyer, Fillonis, Proietti, Heaps, & Egan, 2001; Saatci, Hardy, & Cahill, 2007; Strauss et al., 2006), the results of the current analyses should be interpreted with caution in that respect.

Therapeutic Practices
The estimated effect sizes for the association of both attachment security ($r = .18$) and attachment anxiety ($r = -.22$) with treatment outcomes are in the small-to-moderate range, but just below those found for the association of therapeutic alliance with outcome reported in this volume. Thus, in these 14 studies, clients' attachment style appears to contribute almost as much variance to psychotherapy outcome as does the alliance, a well-established and potent predictor of therapeutic change. However, clients' attachment security also tends to be positively associated with therapeutic alliance, with an average effect size of $r = .17$ according to a recent meta-analysis (Dieners, Hilsenroth, & Weinberger, 2009). Perhaps the capacity to develop a positive therapeutic alliance is enhanced by a client's level of attachment security. Conversely, the formation of a positive therapeutic alliance may serve as one mechanism by which a client's level of attachment security leads to better psychotherapy outcomes. Finally, an intriguing possibility is that both attachment security and therapeutic alliance predict unique aspects of psychotherapy outcome.

We derive several practice implications of the empirical research on attachment style and our meta-analysis that can guide psychotherapists:

- Assess the patient's attachment style. Attachment style or organization can influence the psychotherapy process, the responses of both patients and therapists, the quality of the therapeutic alliance, and the ultimate outcome of treatment. Thus, therapists should be attuned to indicators of a patient's attachment style. Formal interviewing or use of reliable self-report measures can be useful as part of the assessment process.

- Understanding a patient's attachment organization will provide important clues as to how the patient is likely to respond in treatment and to the therapist. Expect longer and more difficult treatment with anxiously attached patients but quicker and more positive outcomes with securely attached patients.

- Knowledge of the patient's attachment style can help the therapist anticipate how the patient may respond to the therapist's interventions and guide the therapist in recalibrating to the patient's interpersonal style. That is, if the patient is dismissing in
psychotherapy outcome, and this possibility might be further explored in future research.

Additionally, client age emerged as a significant moderator, such that the positive relation between attachment security and outcome was attenuated in samples that were older on average. This finding may be explained by cross-sectional research showing that older adults are more likely to be securely attached, and less likely to be fearful attached, than younger adults (Diehl, Elnick, Bourbeau, & Labovitz, 1998; Mikkelson, Kessler, & Shafer, 1997). If this is a developmental, rather than cohort-based, effect, this difference suggests that some preoccupied individuals become secure (perhaps by finding or creating an intimate relationship with a trustworthy other) as they age. Thus, it may be that there is a weaker relation between attachment and therapy outcome among older adults because there is less variability in their characteristic attachment styles.

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There are still relatively few empirical studies that have examined how client attachment influences psychotherapy outcome. In addition, there are few investigations regarding matching patients to treatments or therapists based on attachment patterns; so few, in fact, that we could not submit them to a meta-analysis.

Furthermore, in order to produce findings that are comparable to one another and that can be combined to yield meaningful and clinically relevant conclusions, it is important for investigators to use measures of attachment that are well validated and commonly used in the literature. Some studies have used attachment measures that do not correlate well with other measures of attachment, and that do not appear to converge with underlying dimensions of adult attachment (anxiety and avoidance).

Another limitation of our meta-analyses is that we could not control for the correlations between attachment and pretreatment functioning. The interpretation of posttreatment symptoms as outcome is potentially problematic because it does not consider baseline levels or actual change in symptoms as a function of treatment. Hence, any association between attachment and posttreatment functioning may, to some degree, reflect the relation between attachment and psychopathology. Although a number of studies that did control for the influence of pretreatment functioning on the association between attachment security and outcome have reported findings that are consistent with ours (e.g., Meyer, Ikinosis, Proietti, Heaps, & Egan, 2001; Saat, Hardy, & Cahill, 2007; Strauss et al., 2006), the results of the current analyses should be interpreted with caution in that respect.

Therapeutic Practices
The estimated effect sizes for the association of both attachment security ($r = .18$) and attachment anxiety ($r = -.22$) with treatment outcomes are in the small-to-moderate range, but just below those found for the association of therapeutic alliance with outcome reported in this volume. Thus, in these 14 studies, clients' attachment style appears to contribute almost as much variance to psychotherapy outcome as does the alliance, a well-established and potent predictor of therapeutic change.

However, clients' attachment security also tends to be positively associated with therapeutic alliance, with an average effect size of $r = .17$ according to a recent meta-analysis (Diener, Hilsenroth, & Weinberger, 2009). Perhaps the capacity to develop a positive therapeutic alliance is enhanced by a client's level of attachment security. Conversely, the formation of a positive therapeutic alliance may serve as one mechanism by which a client's level of attachment security leads to better psychotherapy outcomes. Finally, an intriguing possibility is that both attachment security and therapeutic alliance predict unique aspects of psychotherapy outcome.

We derive several practice implications of the empirical research on attachment style and our meta-analysis that can guide psychotherapists:

- Assess the patient's attachment style. Attachment style or organization can influence the psychotherapy process, the responses of both patients and therapists, the quality of the therapeutic alliance, and the ultimate outcome of treatment. Thus, therapists should be attuned to indicators of a patient's attachment style. Formal interviewing or use of reliable self-report measures can be useful as part of the assessment process.
- Understanding a patient's attachment organization will provide important clues as to how the patient is likely to respond in treatment and to the therapist. Expect longer and more difficult treatment with anxiously attached patients but quicker and more positive outcomes with securely attached patients.
- Knowledge of the patient's attachment style can help the therapist anticipate how the patient may respond to the therapist's interventions and guide the therapist in calibrating to the patient's interpersonal style. That is, if the patient is dismissing in...
his or her attachment, the therapist may need to be more engaged. In contrast, if the patient is preoccupied in his or her attachment, the therapist should consider a stance designed to help the patient contain his or her emotional experience. This may include explicit articulations of the treatment frame, the provision of more structure to compensate for the patient’s tendency to feel muddled, and efforts to avoid collusion with the patient who may pull the therapist to engage in more emotional/experiential techniques that only contribute to the patient feeling overwhelmed.

* At the same time, psychotherapists should not go too far in contrasting patients’ attachment styles. Practice and research suggest that therapistsistrate their interpersonal styles so as not to overwhelm dismissing patients or to appear disengaged, aloof, or uninterested to preoccupied patients.

* There is preliminary evidence that dismissing individuals do respond to cognitive or interpretive treatments slightly better than interpersonally focused treatments, at least in the context of short-term treatments. With regard to patients who score high on both the attachment anxiety and avoidance dimensions (fearful avoidant clients), it is especially important to attend to the structure of their internal working models, as findings suggest that there is much variation in this group’s functioning in therapy and outcome.

* Attachment style can be modified during treatment, even in brief treatments and for patients with severe attachment difficulties, such as those suffering from borderline personality disorder. Therefore, change in attachment can be conceptualized as a proximal outcome, not just a predictive patient characteristic, and could be considered a goal of treatment.

Therapists might consider intervening with their patients in an effort to change attachment style. Early findings suggest that the focus on the relation between the therapist and patient and/or the use of interpretations may be the mechanisms by which change in attachment organization is achieved, at least for severely disturbed personality-disordered patients (Haglend et al., 2009; Levy et al., 2006). However, the early research also demonstrates that a range of treatments may be useful for achieving changes in attachment representations in less disturbed patients with neurotic-level or Axis I disorders.

References

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