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THERAPIST AND CLIENT ATTACHMENT AND THE THERAPEUTIC ALLIANCE

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by

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ABSTRACT

The therapeutic alliance has often been found to explain significant portions of the variance in therapy outcome, yet surprisingly little is known about the participant factors that contribute to the development of a strong working alliance. One participant factor that may play a key role in the development of the alliance is attachment. In the present paper, research is reviewed that relates to the influence of therapist and client attachment on alliance, and an investigation is presented that sought to further address this question in a sample of 4 therapists and 69 clients from a randomized controlled trial of cognitive-behavioral therapy (CBT) for generalized anxiety disorder (GAD). Results provide support for the influence of attachment factors on the development of the alliance. Specifically, therapist attachment significantly influenced both early client-rated working alliance, and the trajectory of alliance development over time. Client attachment factors did not influence alliance ratings early in therapy, but two dimensions of attachment, vulnerability and lacking in childhood memories, significantly influenced the development of alliance over time. Implications for future research and clinical applications are discussed.

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Chapter 1

Introduction

Throughout much of the extant literature on the factors that contribute to efficacious psychotherapy interventions, the therapeutic alliance is among the most consistently cited factors that explain significant proportions of the variance in successful therapy outcomes (Martin, Garske, & Davis, 2000). Despite this growing body of research on the important role the alliance plays in therapy outcome, surprisingly little is known about the factors that contribute to its development. Although several factors have been proposed to be components of a positive therapeutic alliance (e.g., empathy, positive regard, and congruence; managing alliance ruptures and countertransference), less attention has been paid to the characteristics of therapists and clients that might facilitate or interfere with their ability to develop a strong working alliance (Beutler, 1997). The aim of the present study is to review relevant research and conduct an investigation examining the relationship between one such participant characteristic that may prove to be a valuable construct in the search to elucidate the factors underlying the development of the therapeutic alliance, namely, therapist and client attachment styles.

Therapist Attachment and Alliance

Whereas participant factors have often been studied to help explain outcome variance, much of this research has focused on client characteristics that are associated with outcome (Newman & Stiles, 2006; Newman, Crits-Christoph, Connelly Gibbons, & Erickson, 2006; Castonguay, Constantino, & Holtforth, 2006). The client characteristics that have been found to be relevant to the development of the therapeutic alliance include an array of inter- and intra-personal factors, such as avoidance/resistance or defensiveness, lack of emotional

involvement, low self-affiliation and negative introjects, difficulties in interpersonal relationships, poor object relations, and negative early relationship with parents and attachment difficulties (see Constantino, Castonguay, & Schut, 2002 for a comprehensive review). These factors are likely to play a role in the development of any relationship, and therefore the attention given to them in the study of client contributions to alliance formation is certainly justified. However, because the client-therapist dyad is an inherently interpersonal interaction, it is also important to understand what the therapist contributes to alliance development. In fact, it has been argued by some that therapist variables are at least as important as client characteristics, and are essential to our understanding of the conditions necessary for the development of a sound alliance (Beutler, 1997). One recent large-scale study of 1,198 patients and 60 therapists found that as much as 8% of the total variance in outcome could be attributed to therapist effects (Lutz, Leon, Martinovich, Lyons, & Stiles, 2007). These results appear to be in accordance with an earlier meta-analysis by Crits-Christoph and Mintz (1991) who reported that therapist effects accounted for a mean of 8.6% of outcome variance across the studies they reviewed. These investigations highlight the important contribution of therapist characteristics, but fail to outline what the mechanism of those effects might be and how they might have specifically contributed to alliance and outcome. In a series of review papers on the topic of therapist characteristics that impact the therapeutic alliance, Ackerman and Hilsenroth (2001, 2003) found that regardless of the theoretical orientation of the clinician, therapists who are rigid, uncertain, exploitive, critical, distant, tense, aloof, and distracted appeared to engender negative alliances with their clients (Ackerman & Hilsenroth, 2001). Conversely, therapist characteristics found in the authors'

subsequent review to lead to positive alliance included flexibility, trustworthiness, interest, friendliness, warmth, and openness (Ackerman & Hilsenroth, 2003).

A therapist characteristic that may underlie many of these interpersonal factors is attachment style. According to Bowlby (1988), an individual's attachment style is proposed to represent his or her internal working model of others. Whereas such models are typically crystallized in childhood, they continue to affect interpersonal interactions throughout life. These secure or insecure attachment styles influence the degree to which an individual is comfortable with closeness and intimacy, as well as the degree to which they can depend on and trust others.

Drawing from several diverse fields such as ethnology, psychoanalysis, evolution, and cognitive and developmental psychology, John Bowlby (1969) described attachment theory in an attempt to better understand the emotional bonds that develop between children and their caregivers, and the consequences of these early experiences on long-term personality development, psychopathology, and interpersonal functioning (Davila & Levy, 2006). Bowlby conceptualized attachment as a functional behavioral system and attachment theory as a model of human motivation that facilitates social learning, infant safety in the face of dangers, and the availability of comfort during periods of distress. Bowlby believed that a child who experiences his/her caregiver (or attachment figure) as available, responsive, and consistently warm and sensitive will develop a secure attachment, and the child will learn to use the attachment figure as a secure base to turn to for comfort and soothing in times of distress. Conversely, those children who do not find these qualities in their caregivers will develop insecure attachments and be unable to utilize these figures as a secure base for soothing and comfort.

Bowlby's concept of a secure base was first empirically investigated by Mary Ainsworth and her colleagues (Ainsworth, Blehar, Waters, & Wall, 1978) in a series of observational studies of mother-infant interactions. In these studies, Ainsworth and her colleagues recorded the behavior exhibited by infants toward their caregivers in a procedure termed the Strange Situation, in which children were observed exploring a novel environment with their mother present, after a separation from their mother, after the introduction of a stranger, and finally, after the reunion with their mother. From these experiments Ainsworth identified three primary patterns of attachment: secure, insecure anxious-avoidant (or dismissing), and insecure anxious-ambivalent (or preoccupied). Infants who were labeled as securely attached explored the novel situation freely, demonstrated mild anxiety upon maternal separation, and were comforted easily upon their mothers' return. Infants who were classified as anxious-avoidant displayed little interest in their mothers and relatively little strong affect throughout the experiment. Those infants who were labeled as anxious-ambivalent demonstrated high levels of anxiety and anger and were more difficult to sooth once reunited with their mothers. Longitudinal studies have since shown that these early attachment patterns continue to influence interpersonal patterns into adulthood (e.g., Egeland & Sroufe, 1981; Egeland & Farber, 1984; Grossman & Grossman, 1991; Main & Cassidy, 1988). This continued influence is believed to be a function of the gradual development of what Bowlby (1973, 1988) termed internal working models, or internalized mental representations of attachment interactions which serve as a guide for the individual when negotiating future attachment interactions, thus continuing to moderate interpersonal relationships throughout life.

Since Bowlby and Ainsworth's pioneering work began nearly four decades ago, many researchers have continued to further our understanding of the attachment bonds children form and their implications for social and emotional development, both healthy and maladaptive (cf. Cassidy & Shaver, 1999). Though clinical research has seen an increased focus on the role of client attachment style as a moderating factor in the development of pathological behavior (Dozier, Stovall & Albus, 1999), very few studies have explored what role, if any, a therapist's attachment orientation may play in facilitating helpful therapies (Davila & Levy, 2006; Daniel, 2006). It is likely that the emotional and interpersonal factors that are derivative of an individual's attachment style can have consequences for a therapist's ability to manage many of the alliance-relevant tasks. Furthermore, it has been demonstrated that early alliance formation is a better predictor of outcome than alliance in the later stages of therapy (Horvath & Symonds, 1991). This trend suggests that the behavior of the therapist in the earliest stages of therapy may be the most important in establishing a positive relationship with clients, and it is during these early encounters with a new client that a therapist's interpersonal and attachment factors may be most relevant. In other words, if we wish to understand the factors that contribute to alliance (especially early alliance formation), research examining the role of therapist attachment style appears to be a promising area of investigation.

Of the few examples that exist in the literature examining the role of therapist attachment, each has both interesting insights to offer and a number of key limitations. One study conducted by Dozier, Cue, and Barrett (1994) examined the relationship between case managers' attachment style and the types of interventions they implemented with their clients. In this study, both the attachment styles of case managers and clients were assessed using the

Adult Attachment Interview (George, Kaplan, & Main, 1985), and case managers were interviewed about their interactions with clients, which were coded for degree of depth of intervention and attention to client dependency needs. The authors found that securely attached case managers were both better able to respond to their clients' needs and to resist the interpersonal "pull" to behave in ways that might confirm their clients' negative internal working models. Insecurely attached case managers, on the other hand, showed a tendency to respond to their preoccupied clients with more intensity and were more likely to evaluate their preoccupied clients as having greater dependency needs than clients with a dismissing attachment style. In other words, the insecurely attached case managers were less able to avoid behaving in ways that complemented the clients' attachment style, and therefore the attachment orientation of the case manager played a role in the type and quality of care provided to their clients. Whereas this study provided interesting insights into the role of caregiver attachment style, it had several limitations. First, the nature of the relationship between clinical case managers and their clients is fundamentally different from the relationship between psychotherapist and client in several key areas, including the length and frequency of interaction, as well as the nature of the collaborative work. Because these relationships are so different, it is difficult to have confidence in how these results might generalize to the therapist-client relationship. Additionally, the interactions between case manager and client were not directly observed by the researchers, but instead relied on the report of the case managers, which introduces the possibility of biased reporting or error on the part of the case manager about the nature of the interaction. Finally, the attachment styles of the case managers were not tested to predict outcome or moderate or mediate any process

variables, so it is difficult to establish how much their attachment style may have impacted on alliance and outcome.

Following up on these results, Tyrrell, Dozier, Teague, and Falot (1999) conducted a study in which they examined the relationship between case manager and client attachment styles, and the impact on therapeutic relationships and client functioning. In this study, the authors found that clients who tended to minimize the importance of early attachment relationships and avoided attachment-related topics tended to develop better therapeutic alliances and displayed higher levels of functioning when paired with case managers who valued the importance of early attachment relationships. On the other hand, clients who recognized the value of close relationships and the importance of early attachment relationships formed better alliances with case managers who diminished the importance of these relationships. The authors concluded that clients appeared to benefit most when working with case managers whose attachment orientation was different from their own, and they suggested that matching clients and caregivers for balance on these interpersonal dimensions may be an important avenue to explore in order to maximize the development of a strong working alliance and thereby to improve client outcome. Although this investigation did examine the relationship between case manager attachment and both alliance and measures of client functioning, it also contained some key limitations. Again the participants were case managers and not psychotherapists, which brings the degree to which we can generalize these results into question. Also, the authors' conclusion advocates for a matching of therapist and client on these attachment dimensions, a practice which is not feasible for many practicing psychotherapists, both because of the likely unavailability of alternative therapists to refer them to (especially in single-therapist practices and rural areas), the lack of

attachment information on all clients, and the time, training, and resources required to conduct such assessments in order to perform an appropriate match.

Another study that examined the relationship between caregiver attachment style and its potential impact on therapeutic responding was conducted by Rubino, Barker, Roth, and Fearon (2000). Clinical psychology graduate students were asked to respond to therapy vignettes of analogue clients displaying four different attachment styles. In this investigation, therapist attachment style was assessed via the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994), a self-report measure that classifies respondents into the attachment categories of secure, preoccupied, dismissing, and fearful. Therapists were then asked to view the videotaped vignettes and to respond to potential alliance ruptures with four analogue clients, each of whom represented one of these four attachment styles. The therapist's responses were coded for depth of interpretation and empathy. The results suggested that the fearful/anxiously attached therapists responded with less empathy, but no therapist differences were found with regard to depth of interpretation. This study suggests that therapist attachment style may play a role in some aspects of the therapeutic process, but the results must be qualified by a number of methodological concerns. First, therapist attachment style was assessed via a self-report measure that has been found to be poorly correlated with more reliable instruments, such as the Adult Attachment Interview (Crowell, Treboux, & Waters, 1999). Secondly, the therapists were asked to respond to videotaped vignettes of artificial clients with whom they had no real relationship and no cache of experiences upon which to reflect in formulating their responses. Furthermore, the therapist's degree of empathy and depth of interpretation were coded on the basis of only one response to the videos. Finally, although this study suggests a potential link between therapist

attachment style and potential ability to resolve alliance ruptures, it fails to address the role of attachment in the development of a therapeutic alliance, or to evaluate its relationship to client outcome.

Sauer, Lopez, and Gormley (2003) investigated the relationship between client and therapist attachment orientations and the working alliance in the early phase of therapy in a sample of 28 clients (17 of which completed all phases of data collection) at university and community counseling centers. In this study, attachment was measured after the first session with a self-report measure called the Adult Attachment Inventory (Simpson, 1990) and alliance was assessed with the Working Alliance Inventory (Horvath & Greenberg, 1989) at the end of the first, fourth, and seventh therapy sessions. Results indicated that therapists who were categorized as fearful/anxiously attached had a significant positive effect on client ratings of the working alliance after the initial session, but significant negative effects on the alliance as therapy progressed. These findings are important for at least two reasons. First, they are in contrast to the trend found in other studies examining the effect of therapist attachment, which tend to find that secure attachment is associated with better alliance formation. Secondly, the results highlight the importance of measuring alliance over time, as it is possible that working alliance may continue to be affected by attachment factors as the therapist-client relationship develops over sessions. Despite these interesting findings, it is very important to mention some key limitations. The sample size was small, and the attrition rate was high, tempering our ability to generalize beyond the sample used.

Mohr, Gelso, and Hill (2005) investigated the effect of counselor and client attachment on ratings of session smoothness and depth and countertransference behavior in first counseling sessions in a sample of 93 student-volunteer client analogues and counselor

trainees. In this study, counselor trainee and client attachment was measured via self-report using the Experiences in Close Relationships Scale (Brennen, Clark, & Shaver, 1998), session smoothness and depth were reported by clients and counselors on the Smoothness and Depth subscales of the Session Evaluation Questionnaire (Stiles & Snow, 1984), and countertransference behavior was measured by supervisors observing the sessions via one-way mirrors. In this investigation, countertransference was defined as “a counselor’s observable reactions to clients that result from the counselor’s own unresolved issues and personal conflicts” (Mohr, Gelso, & Hill, 2005; pp. 300). The results of the study indicated that client fearful attachment was negatively associated with client and counselor ratings of session smoothness and client ratings of session depth. Dismissing counselor attachment was also associated with higher supervisor ratings of hostile countertransference. Furthermore, significant client-counselor interactions were found, suggesting that countertransference is most likely to occur when the counselor and the client report differences in their attachment insecurity. Specifically, the authors found that countertransference was highest when the counselor had a fearful or dismissing attachment pattern and the client had a preoccupied attachment pattern.

Although this study assessed smoothness, depth, and countertransference behavior as a function of attachment and did not measure therapeutic alliance, the findings are relevant in that they highlight the important role that attachment factors may play in in-session behavior and the impact of these attachment patterns on interpersonal transactions between client and therapist, both of which are related to the factors that contribute to the development of the alliance. It is very important to note, however, that this study had many limitations, including the fact that the clients in this study were students volunteering to

participate in the investigation, and therefore were not treatment-seeking individuals with any diagnosed psychopathology. Additionally, the data for this study were drawn from only the first session, offering no insight into the development of the therapeutic relationship over time. Finally, the authors' decision to measure "overt" countertransference via supervisor ratings and to define it as an observable behavior presents significant problems, particularly because this construct has historically referred to unconscious dynamics playing out within the therapists, and the connection between this internal process and any observable behavior is unknown. Conclusions based on an observable countertransference are thus tenuous at best.

Bruck, Winston, Aderholt, and Muran (2006) assessed the attachment styles of 46 therapist-patient dyads to determine the relationship between these factors and both psychotherapy process and outcome. In this study, therapist and client attachment was measured with the Relationship Scales Questionnaire (Griffin & Bartholomew, 1994) prior to beginning therapy, involving 30 sessions of either cognitive-behavioral therapy (CBT; n=19) or short-term dynamic psychotherapy (STDP; n=27). Working alliance was measured with a 12-item version of the Working Alliance Inventory (Tracey & Kokotovic, 1989), and the smoothness and depth of sessions was measured with the Session Evaluation Questionnaire, each of which was completed by both the client and therapist following the first six sessions. This investigation yielded several interesting results regarding the influence of therapist attachment on the process of psychotherapy, regardless of whether patients were undergoing CBT or STDP (see below for a discussion of the impact of client attachment patterns on alliance found in this study). The authors found that therapist secure attachment significantly predicted both strength of working alliances and session depth. Additionally, therapist preoccupied attachment style negatively predicted session smoothness. This

investigation also sought to examine the impact of therapist-client match on alliance, smoothness, and depth. It found that the greater the difference between therapists and their clients on attachment patterns, the stronger the alliance and the more smooth and deep the sessions were rated. The authors concluded from their data that therapist personality factors, such as attachment, had greater predictive value than these same factors measured in clients for both in-session process and outcome. They also concluded that client-therapist match (or rather, mismatch) on these factors had an even greater predictive value on outcome than either client or therapist attachment, separately. It is important to note, however, that this study has a number of limitations, including a small sample size and the fact that all of the significant relationships between therapist attachment and in-session process (i.e., WAI, SEQ) were found only for variables based on therapist report, thus introducing questions about the discrepancy between therapist and client reports. Thus the results, while promising, must be interpreted with caution.

Black, Hardy, Turpin, and Parry (2005) sought to further explore the possible relationship between therapist attachment style and alliance through the use of a large survey of practicing psychotherapists. In this study, the authors mailed self-report questionnaires to nearly 500 therapists measuring alliance quality (Agnew Relationship Measure; Agnew-Davies, Stiles, Hardy, Barkham, & Shapiro, 1998), attachment behaviors (Attachment Style Questionnaire; Feeney, Noller, & Hanrahan, 1994), problems in therapy, and an inventory of personality factors (Brief Eysenck Personality Questionnaire; Eysenck & Eysenck, 1969). Their results indicated that therapist attachment style was a better predictor of alliance quality than problems in therapy or personality factors; secure attachment was positively related to alliance, whereas anxious/fearful attachment was associated with more problems in

therapy and poorer therapeutic alliance. Though the results from this study are promising with regard to the influence of therapist attachment, the investigation has a number of limitations. First, attachment was measured via self-report, which tends to be less reliable than interview assessments (i.e., AAI). Secondly, the investigators only received completed measures from 491 of the 1,400 therapists who were contacted to participate, thus introducing a sampling bias. Additionally, the alliance and therapy problem measures were completed by only the therapist and therefore reflective of their perceptions of these factors. Thus it is impossible to detect any discord between therapist and client perceptions of the relationship. Finally, the measure of alliance completed by therapists was not completed for each of their current clients. Instead, the therapists were instructed to complete the measure about their relationships with clients in general, and therefore all relationships were essentially averaged to complete one measure per therapist, thus introducing a large amount of measurement error.

To date, only one study that measured therapist attachment style failed to show any meaningful relationship with alliance (Ligiero & Gelso, 2002). In this investigation, 50 therapists participated in a survey of therapist attachment style and working alliance with one client who had attended between three and nine sessions and whom they had discussed to some degree with their supervisor. Supervisors also participated in the study and completed ratings of observed supervisee countertransference behavior with the Countertransference Index (Hayes, Riker, & Ingram, 1997) and the Inventory of Countertransference Behavior (Friedman & Gelso, 2000) and alliance with the Working Alliance Inventory-Short Version (Tracey & Kokotovic, 1989). In this study, therapist attachment style was measured via self-report with the Relationship Questionnaire (Bartholomew & Horowitz, 1991). Correlational

analyses indicated no significant relationship between therapist attachment style and working alliance. This study contained some methodological limitations. First, therapist attachment style was measured via self-report, which has been shown to be a less reliable method of assessing attachment compared to interviews such as the AAI, as mentioned earlier. Additionally, the alliance measure was only completed by the therapists and their supervisors and not by clients, therefore failing to capture any therapist-client disagreement on the quality of the alliance.

Although only a few studies have been conducted that directly measured therapist attachment style in relation to alliance quality, numerous other investigations have supported the idea that attachment-related factors are important therapist characteristics in the development and maintenance of the therapeutic alliance (see Ackerman & Hilsenroth, 2001 & 2003). Such factors as hostile or disaffiliative introjects (Henry, Schacht, & Strupp, 1990), self-directed hostility, and degree of comfort with closeness in interpersonal relationships (Dunkle & Friedlander, 1996) have all been shown to impact alliance. Therefore, it is likely that an investigation that improves upon the methodological problems of the existing research can potentially offer a clearer picture of the role that therapist attachment style may play in the development of the therapeutic alliance. Despite the shortcomings of these studies, however, each contributes a valuable piece of evidence supporting the possibility that attachment style may be an important therapist/caregiver characteristic which can contribute to the development of a strong therapeutic alliance and therefore to positive therapeutic outcomes.

In addition to the potentially important role of therapist attachment and its effect on alliance formation outlined above, perhaps an equally important question relates to the

unique influence that client attachment patterns may have on the development of the therapist-client relationship.

Client Attachment and Alliance

Although there have been numerous studies conducted on the important role that early childhood relationships and parent/child dynamics may play in the development and maintenance of psychopathology (e.g., Cassidy, Lichtenstein-Phelps, Sibrava, Thomas & Borkovec, 2009) as well as in the focus of the content of psychotherapy (Hoffman, Marvin, Cooper, & Powell, 2006; Makinen & Johnson, 2006; Toth, Cicchetti, & Rogosch, 2006; van Zeijl, Mesman, van Ijzendoorn, & Bakermans-Kranenburg, 2006), relatively few studies have addressed the potentially important role that client attachment factors may play in the process of psychotherapy and the development of the therapeutic alliance (Daniel, 2005). As was the case with research on therapist attachment, the studies that exist in the literature have both important contributions to make to our understanding of what makes therapy successful, but at the same time, they have key limitations.

Kokotovic and Tracey (1990) addressed the role of client interpersonal factors in the development of the working alliance in a sample of 144 clients at a university counseling center. They found that clients who were viewed by their therapists as having poor current and past interpersonal relationships tended to have poorer working alliances, as measured by both the client and therapist Working Alliance Inventory (Horvath & Greenberg, 1986). Although this study highlights the important role of relationship quality in the formation of the alliance, it is important to note that this study did not specifically measure attachment. Instead, a construct presumed to be derivative of attachment style, quality of interpersonal relationships, was employed. Furthermore, the alliance was measured only after the first

counseling session, and therefore the impact of these interpersonal problems on the development of the alliance over time is unknown.

Another study examining the issue of early parental relationships and the development of the alliance by Mallinckrodt (1991) surveyed 102 client-counselor dyads with regard to the working alliance at session three, as well as the quality of the clients' current social relationships and the clients' memories of overprotection (i.e., intrusive control and efforts to resist the child's attempts at independence) or care (i.e., emotional responsiveness, warmth, and attention to the child's needs) with regard to their childhood emotional bonds with their mother and father. Mallinckrodt (1991) found that current satisfaction with social relationships was predictive of client-rated working alliance, and the client's childhood bonds (especially with fathers) were predictive of counselor-rated working alliance. Whereas these results offer a promising clue about the potential importance of early parent-child bonding in the development of a strong alliance, it still falls short of measuring attachment directly. Thus, specific conclusions cannot be drawn with regard to the relationship between attachment and alliance.

A study conducted by Mallinckrodt, Coble, and Gantt (1995) examined the relationship between working alliance and parental bonds and social competencies (including self-efficacy and adult attachment) in a sample of 76 female clients at four university and community outpatient clinics. In their investigation, participants were clients offered the opportunity to volunteer to complete a small battery of measures including the Parental Bonding Instrument (Parker, Tupling, & Brown, 1979), the Self-Efficacy Scale (Sherer, Maddux, Mercadante, Prentice-Dunn, Jacobs, & Rogers, 1982), the Adult Attachment Scale (Collins & Read, 1990), and the client form of the Working Alliance Inventory (Horvath &

Greenberg, 1986, 1989). The authors found that social competencies accounted for 14% of the variance in client working alliance ratings, and parental bonds accounted for 23% of the variance. These promising results are tempered by some key limitations of the study, however, and include the self-report nature of the attachment measure, a potential sampling bias introduced by the fact that less than half of all eligible clients agreed to participate and all who did were female, and the variation in the length of time in therapy across clients at the time of completing the measures.

In a sample of 60 clients seeking therapy at a university counseling center, Satterfield and Lyddon (1995) assessed the relationship between working alliance measured at session three and three aspects of client attachment using the Adult Attachment Scale (Collins and Read, 1990). These three dimensions included (a) *depend*, the extent to which individuals trust others and depend on their availability when needed, (b) *anxiety*, the extent to which the individual fears being abandoned or not being loved, and (c) *close*, the extent to which the individual is comfortable with closeness and intimacy. Their results yielded a significant relationship between the ability to depend on others and alliance, with those clients reporting low levels of trust and a low ability to depend on others reporting a more negative alliance. Whereas the Satterfield and Lyddon study suggests a promising connection between attachment and alliance, the authors cautioned that these results are mitigated by some key limitations, including the high attrition rate of participants and the fact that the counselors in the study were still trainees and relatively inexperienced, and the fact that alliance information was collected at only one time point rather than measuring the development of alliance over time.

In a study designed to address the potential interaction of alliance, attachment, and therapist experience, Kivlighan, Patton, and Foote (1998) conducted a study with 40 clients from university counseling centers and predicted that client attachment status would serve to moderate the relationship between counselor experience and client-perceived working alliance. To operationalize counselor experience as a continuous variable, the authors created a simple system of categorizing therapists by number of years of experience. Using the Adult Attachment Scale to generate a score for clients along the three attachment dimensions of *depend*, *anxiety*, and *close*, the study yielded two interesting results. First, counselor experience was found to be unrelated to client-rated working alliance, and second, client comfort with intimacy (as measured by the *close* dimension of the Adult Attachment Scale) was associated with a stronger working alliance with counselors. Again, however, this study contained some key limitations, including the small sample size, the correlational nature of the study, and the lack of data regarding the development of alliance over time.

In a series of studies, Mallinckrodt and his colleagues (Mallinckrodt, King, & Coble, 1998; Mallinckrodt, Porter, & Kivlighan, 2005) sought to address the role of attachment in therapy from a slightly different perspective by testing the influence of clients' attachment to their therapists rather than the influence of attachment in general. In the first of these investigations, Mallinckrodt, King, and Coble (1998) implemented a measure called the Client Attachment to Therapist Scale (Mallinckrodt, Gantt, & Coble, 1995), which was designed to assess clients' perceptions of the therapeutic relationship from the perspective of attachment theory along three dimensions: (a) secure attachment (e.g., experiencing the therapist as responsive, emotionally available, and a comforting presence), (b) avoidant-fearful attachment (e.g., suspicion that the therapist is disapproving and likely to be rejecting

and reluctant to make personal disclosures, and a feeling of being threatened or humiliated in sessions), and (c) preoccupied-merger attachment (e.g., longing for more contact with the therapist, including desires to expand the relationship beyond the bounds of therapy, a desire to be “at one” with the therapist, and a preoccupation with the therapist and the therapist’s other clients). Using this measure in a sample of 61 clients, along with a measure of childhood family structure and interactions (Family Structure Survey; Lopez, Campbell, & Watkins, 1988), the authors found that fear of separation, parent-child role reversal, and parental marital conflict (all measured by the Family Structure Survey) were all associated with poor attachment to the therapist. Although it is extremely important to note that this study did not measure working alliance, and therefore no conclusions can be directly drawn with regard to the attachment-alliance relationship, this study nonetheless provides useful insights into the complex ways that client attachment and the childhood parental environment may play in the bond that forms between a client and a therapist.

In a later paper examining the working alliance and depth of in-session exploration with respect to both client attachment in general and client attachment to the therapist, Mallinckrodt and colleagues (Mallinckrodt, Porter, & Kivlighan, 2005) found that insecure attachment in adult romantic relationships as measured by the Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998) was associated with insecure attachment to the therapist as measured by the Client Attachment to Therapist Scale. Furthermore, it was found that secure attachment to the therapist was associated with greater session depth and smoothness and a strong working alliance, as measured by the Working Alliance Inventory (Horvath & Greenberg, 1989). One of the more interesting findings from this study was the fact that certain subscales of the Client Attachment to Therapist Scale

predicted unique variance in clients' in-session experiences not accounted for by alliance alone, such as session depth and smoothness. This suggests that while attachment factors are relevant for understanding what contributes to the development of a strong therapeutic alliance, further study of these attachment factors may yield additional valuable information regarding the dynamics of the therapeutic process and the nature of the bond between client and therapist.

One key limitation of the studies outlined above is that fact that in each of them, quality of therapeutic alliance was only measured at one point in time, limiting our ability to draw conclusions about the impact of attachment and attachment-related factors on the development of alliance over time. Because the timeline of alliance development has been shown to be important (Horvath & Symonds, 1991) and because it is possible that attachment factors may differentially influence the quality and development of relationships, the need for research to clarify the temporal influence of attachment on alliance is certainly warranted.

A few examples exist in the literature of studies that addressed the potentially important relationship between client attachment and the development of the therapeutic alliance over time. One study conducted by Kanninen, Salo, and Punamaki (2000) examined the attachment and alliance relationship in a sample of 36 former political prisoners undergoing treatment for trauma. In this study, client attachment was measured by a modified paper-and-pencil version of the Adult Attachment Interview (George, Kaplan, & Main, 1985), and clients were placed into one of three attachment categories; autonomous (secure), preoccupied, and dismissing. Alliance was measured with the client version of the Working Alliance Inventory (Horvath & Greenberg, 1989) at three points in therapy: the beginning (after the third session), the middle (during the fifth or sixth month), and at the end

of treatment (after the second to last session). The results yielded no significant differences between the attachment groups on alliance ratings at the beginning of therapy, but an interesting pattern emerged over the course of treatment. For both the secure and the preoccupied groups, clients' alliance ratings demonstrated a high-low-high pattern, with the preoccupied group demonstrating both a steeper fall from beginning to middle and a steeper rise in alliance ratings from middle to end of treatment. The dismissing group displayed a different pattern, maintaining high ratings of alliance from beginning to middle of therapy, then a decrease in alliance ratings toward the end of treatment. The authors suggested that this latter pattern may reflect the clients' dismissal of the therapeutic relationship in advance of the pending termination. The Kanninen et al., (2000) study provided important support for the possibility that the development of alliance over time can be affected differently for different types of attachment patterns and suggests further study. Despite these promising results, the study contains a number of important limitations. First, the study was conducted in a small (n=36) and a highly unusual sample of Palestinian ex-political-prisoners, suggesting caution when attempting to generalize the results to the types of clients seen by the typical therapist. Additionally, the authors employed a modified implementation and scoring system for the Adult Attachment Interview, and failed to assess for therapist ratings of the working alliance.

In a sample of 30 outpatients, Eames and Roth (2000) examined the relationship between attachment, working alliance, and alliance ruptures at four points in the early phase of therapy. In this investigation, attachment was measured with the Relationship Scales Questionnaire (Griffin & Bartholomew, 1994), a 30-item self-report measure which yields both dimensional and categorical attachment classifications. They found that secure

attachment was positively related to working alliance and fearful attachment was associated with more negative ratings of alliance. However, these results reached statistical significance only for some aspects of the alliance and for only some sessions. One of the most interesting results of this study emerged with regard to alliance ruptures. Therapists reported significantly fewer ruptures with dismissing clients and significantly more alliance ruptures with preoccupied clients. Although this study was conducted on a small sample and failed to yield consistent, clear findings, the results do hint at another important aspect of therapy process (i.e., alliance ruptures) that may be influenced by the attachment patterns of clients.

In the Bruck et. al (2006) study outlined earlier examining the role of therapist attachment and therapist-client attachment match on therapy process and outcome, the authors concluded that therapist factors appeared to be a more robust predictor. They nonetheless identified some significant results with regard to the unique influence of client attachment. Specifically, they found that client fearful attachment style predicted session depth, as reported by the therapist. Additionally, they found that client preoccupied attachment style negatively predicted client-reported working alliance and session smoothness, with client dismissing attachment style positively predicting client-reported smoothness. Although the authors concluded that therapist factors were stronger predictors in their sample, the fact that these significant relationships emerged for client factors lends further support for their relevance in future research to elucidate and clarify attachment effects on therapy process and outcome.

One of the most recent investigations of the influence of client attachment on working alliance over time was conducted by Goldman and Anderson (2007), who examined the role of client attachment and quality of object relations as predictors of therapeutic alliance and

client dropout. In this study, attachment was measured with the Adult Attachment Scale following their initial intake interview, and the Working Alliance Inventory (Horvath & Greenberg, 1989) was administered after the first, second, and third sessions to 30 clients at university counseling centers. The authors found that security of attachment was related to positive early alliance ratings, but they noted that this effect decreased over time. Client dropout was not found to be related to either attachment or object relations quality in this sample. It is important to highlight a number of limitations with study, most notably the small sample size, the lack of data spanning the duration of therapy, and the low level of research compliance, as only 30 of the original 55 participants completed the study.

One important exception to this conclusion was presented in the study outlined earlier by Sauer, Lopez, and Gormley (2003). The investigators found no effect of client attachment-related anxiety or avoidance on working alliance, and no related interactions had a significant effect on client working alliance ratings. This divergent finding should be interpreted with caution, given the study's methodological problems, including a small sample size and the high rate of client attrition.

The Present Study

Taken together, the research reviewed above provides both interesting clues and leaves many unresolved questions with regard to the nature of the attachment-alliance relationship. Many of these investigations, while offering valuable insights, each had limitations and varied considerably in design and internal validity, thus introducing potential confounds and leaving open the possibility of rival hypotheses with regard to the relationship between attachment factors and the therapeutic alliance. For example, variations in the level of training and experience of clinicians (e.g., clinical case managers vs. trainees vs. doctoral

level therapists), the type of therapy delivered (e.g., CBT vs. psychodynamic vs. unspecified; manualized vs. non-manualized), the number of total therapy sessions and the number of sessions across clients, the measurement moments of alliance over time and the use of analogue clients or clients with heterogeneous psychopathology within samples all contribute to the lack of clarity and confidence we can place in the results and conclusions of these investigations.

The present study sought to further explore the possible relationship between therapist and client attachment style and therapeutic alliance in the context of a randomized controlled trial testing the efficacy of CBT for generalized anxiety disorder (GAD). The present study attempted to improve upon many of the threats to internal validity outlined above in several important ways, allowing a better isolation of the relationship of therapist and client attachment to the working alliance.

This study had four main goals, two related to the attachment style of therapists and its relationship to working alliance, and two related to client attachment patterns and their relationship to working alliance. With regard to therapist attachment style, the present study explored the relationship between securely and insecurely attached therapists and ratings of alliance early in therapy following session two. This is an important question to address, given the research suggesting that early alliance formation may be a better predictor of outcome than alliance in later stages of therapy (Horvath & Symonds, 1991), as well as the possibility that attachment factors may prove most relevant during the beginning stages of any new relationship. Secondly, the current study had the advantage of having repeated measures of alliance at four points throughout therapy, thus allowing for the identification of therapist attachment effects on working alliance over time.

With regard to client attachment patterns, the present study explored the relationship of several dimensions of client attachment and the working alliance. By examining attachment along more specific dimensions, more specific conclusions can be drawn regarding the potential relationship between attachment factors and alliance. It is possible that one of the reasons some of the studies outlined above have been unable to provide clear results lies in the possibility that some degree of specificity may be lost when a client's dimensional attachment data are used to force group membership (e.g., secure, dismissing, or avoidant), and analyses are then conducted using these nominal groups. In the present study, client attachment was assessed by the Perceptions of Adult Attachment Questionnaire (PAAQ; Lichtenstein & Cassidy, 1991), which includes eight subscales measuring dimensions related to both perceptions of early childhood experiences with caregivers (3 subscales: reject/neglect, loved, role-reversed/enmeshed) and, similar to the AAI, current states of mind with respect to attachment (5 subscales: vulnerable, balancing/forgiving, angry, dismissing, lacking memory).

Similar to the questions above regarding therapist attachment, two primary questions were asked with respect to client attachment and the working alliance. The first relates to the relationship between these attachment dimensions and the quality of alliance early in therapy (following the first assessment after session two). The second relates to the potential identification of attachment dimensions that may be related to the development of alliance over time.

Chapter 2

Hypotheses

Hypothesis 1: The relationship of the attachment style of therapists to working alliance ratings.

Based on the accumulated findings from previous research reviewed above, we expected to find that therapist attachment style (secure vs. insecure) would explain a significant portion of the variance in working alliance quality. Specifically, it was predicted that clients who were treated by securely attached therapists would be associated with greater positive early alliances, compared to clients treated by insecurely attached therapists.

Because very limited research exists that examines the relationship of therapist attachment style to the development of alliance over time, specific predictions cannot be based directly on previous findings. However, one might expect that the relationship between alliance and therapist attachment style is likely to extend beyond the early stages of therapy and to have consequences for the alliance as the therapist-client relationship develops. Given this assumption, it was predicted that the course of alliance development over time would be related to the attachment style of the therapists, with clients treated by securely attached therapists demonstrating more positive trends in the trajectory of alliance than those clients who are treated by insecurely attached therapists.

Hypothesis 2: The relationship of client attachment patterns to working alliance ratings.

Commensurate with the preponderance of previous research, it was predicted that early alliance quality would be affected by dimensions of client attachment. Specifically, it was predicted that elevations in those dimensions associated with security of attachment (i.e. loved, balancing/forgiving) and low levels of those dimensions associated with insecure

attachment (i.e. reject/neglect, role-reversed/enmeshed, vulnerable, angry, dismissing, no memory) would be associated with higher ratings of early alliance.

With regard to the relationship between client attachment and alliance over time, two divergent results have been reported. Goldman and Anderson (2007) found that security of client attachment was related to positive early alliance ratings but also found that the effect of client attachment decreased over time. Kanninen, Salo, and Punamaki (2000) reported a different pattern, finding no differences between client attachment groups at the beginning of therapy but noted that the trajectory of alliance over time was different as a function of type of client attachment. Because of these conflicting findings and because no previous study has examined the relationship between eight specific dimensions of attachment and the development of alliance over time, no strong empirical basis exists for predicting the direction and strength of the relationship between each dimension and alliance. However, a general pattern supporting the contention that client attachment security will be associated with overall positive trends in alliance development is likely to emerge. Therefore, it was predicted that elevations in those dimensions associated with security of attachment and low levels of those dimensions associated with insecure attachment would be associated with higher ratings of alliance and more positive trends in alliance change over time.

Chapter 3

Method

Participants

The participants were 4 therapists and their 69 clients, enrolled in a previously published outcome study designed to test the efficacy of CBT for GAD (Borkovec, Newman, Pincus, & Lytle, 2002). The mean age of the clients was 37.14 years, 45 were women, and ethnicity was represented as follows: 62 White, 2 African-American, 3 Hispanic, and 2 Middle Eastern. The therapists in this study were three doctoral level therapists (two female and one male) and one advanced female clinical graduate student, all of whom underwent protocol training by T.D. Borkovec, who continued to supervise them throughout the project.

Procedure

All clients were diagnosed with primary GAD and received 14 weekly sessions of (a) applied relaxation and self-control desensitization, (b) cognitive therapy, or (c) a combination of both. Of the 14 weekly sessions, the first four were 2 hours in duration, and the remaining ten were 1.5 hours (for additional details on the design and methodology of the study, see Borkovec, Newman, Pincus, & Lytle, 2002).

Therapist Attachment. All therapists in the study were administered the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985). Therapist AAI data were collected by two female interviewers, one who interviewed 3 therapists and one who interviewed 1 therapist. These assessors were trained and supervised in the administration of the AAI by Jude Cassidy, who also scored the interviews. The results of these AAI interviews found that of the four therapists, two were classified as securely attached, and two were classified as insecurely attached.

Client Attachment. Attachment was assessed prior to treatment with the Perceptions of Adult Attachment Questionnaire (PAAQ; Lichtenstein & Cassidy, 1991), a 60-item measure designed to assess two key aspects of attachment: (a) an individual's perceptions of his or her early childhood experiences with a primary caregiver (usually the mother), and (b) the individual's "current state of mind with respect to attachment". These two superordinate attachment dimensions had eight subscales. The items were based on Main and Goldwyn's (1984) system for scoring the Adult Attachment Interview (George et al., 1984, 1985) and on Bowlby's attachment theory (1969/1982, 1980, 1988). Participants use a 5-point Likert-type scale, ranging from "strongly disagree" to "strongly agree," to note the extent to which they agree with each statement. The three subscales tapping perceptions of childhood relationship with the primary caregiver include (a) rejection/neglect (11 items; e.g., "When I was a child, my mother sometimes told me that if I was not good she would stop loving me"), (b) being loved (6 items; e.g., "In childhood I felt like I was really treasured by my mother"), (c) role-reversal/enmeshment (10 items; e.g., "I often felt responsible for my mother's welfare"). The five subscales tapping current state of mind with respect to attachment include (a) vulnerable (5 items; e.g., "My mother's issues are still interfering with my life"), (b) balancing-forgiving (7 items; e.g., "Even with all our past difficulties, I realize my mother did the best for me that she could"), (c) angry (5 items; e.g., "No one gets under my skin like my mother"), (d) dismissing/derogating (4 items; e.g., "My family was not particularly intimate, but this has never bothered me"), and (e) lacking in memory about childhood (4 items; e.g., "I have forgotten what most of my early childhood was like"). Each subscale score is derived by computing the mean of the items that comprise that subscale and thus the possible scores range from 1 to 5.

Good psychometric properties for the PAAQ have been reported. For instance, in a validation study of 247 college students (Lichtenstein & Cassidy, 1991), factor analysis revealed support for the theoretically-based subscales, and the subscales showed high internal consistency (coefficient alphas: rejection/neglect = .87, being loved = .87, role-reversal/enmeshment = .79, vulnerable = .71, balancing/forgiving = .70, angry = .80, dismissing/derogating = .62, lacking in memory = .90). In a second sample of 123 mothers, coefficient alphas were rejection/neglect = .91, being loved = .92, role-reversal/enmeshment = .69, vulnerable = .76, balancing/forgiving = .65, angry = .84, dismissing/derogating = .51, lacking in memory = .94) (Lichtenstein & Cassidy, 1991). Similar internal consistency emerged from a study that used six of the eight PAAQ subscales ($n = 206$; Huth-Bocks, Levendosky, Bogat, & von Eye, 2004), with coefficient alphas as follows: rejection/neglect = .91, being loved = .92, vulnerable = .65, angry = .79, dismissing/derogating = .49, lacking in memory = .93). In the current study, coefficient alphas were consistent with these three samples and were as follows: rejection/neglect = .89, being loved = .87, role-reversal/enmeshment = .81, vulnerable = .81, balancing/forgiving = .63, angry = .83, dismissing/derogating = .41, lacking in memory = .94). Good test-retest reliability also emerged in Lichtenstein and Cassidy's (1991) college student sample, ranging from .68 to .86 over a three week re-test interval. In the current sample, test-retest reliability was good for the eight subscales of the PAAQ and ranged from .73 to .89 over a fourteen-week re-test interval. Finally, good construct validity for the PAAQ has emerged. Lichtenstein and Cassidy (1991) reported significant correlations between the PAAQ and AAI subscales in their sample of 123 mothers ($r_s = .46 - .63, p < .01$), except for the enmeshment/role-reversal subscale ($r = .10$) and the dismissing/derogating subscale ($r = .13$). In addition, in the Huth-

Bocks et al. (2004) study mentioned above, higher scores on a composite index of insecure attachment based on six of the eight subscales was found to relate to pregnant women's lower satisfaction with social support and less secure representations of caregiving (assessed with the Working Model of the Child Interview; Zeanah, Benoit, Hirshberg, Barton, & Regan, 1994).

Therapeutic Alliance. The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) is a 36-item self-report questionnaire that measures perceived agreement on the goals and tasks of therapy, as well as the strength of the bond formed between client and therapist. The measure was given at the end of sessions 2, 5, 10, and 14, and was completed by both the therapist and client. Client forms for these measures were submitted in a sealed envelope and were never viewed by the therapist to ensure client comfort and to promote honesty of reporting.

Data Analyses

The present study used Hierarchical Linear Modeling (HLM; Bryk & Raudenbush, 1987) to measure change in therapeutic alliance over time. HLM is a relatively new statistical procedure that has significant advantages for studying change over time. One advantage is that HLM can identify kinds of change overlooked by other commonly used methods (e.g., quadratic, cubic, and other nonlinear representations of the data). Another advantage of HLM is that it can solve certain longitudinal data problems such as how to include participants in the analyses who were not assessed at the same time point (Helson, Jones, & Kwan, 2002).

HLM avoids some limiting assumptions of repeated measures analysis of variance (ANOVA) and correlation when assessing change. One assumption that is built into repeated measures ANOVA is that the overall pattern of changed derived from a sample generalizes

across all individuals within that sample. Following this assumption, ANOVA equates individual differences in change with random error. With regard to correlational analyses, one of the key limiting assumptions is that the relationship between two variables is linear. Because of their relative insensitivity to nonlinear change and individual differences in change, correlations and ANOVA may not adequately capture change over time. HLM avoids these limitations by using as its essential data each individual's trajectory of data points over time. On the basis of these data, the best overall model of change (e.g., linear, quadratic, cubic) is determined and the magnitude and direction of change is estimated for each person (Helson et al., 2002). Perhaps one of the most significant advantages of HLM is its flexibility in handling irregularities in data collection (Osgood & Smith, 1995). For example, HLM does not require the same number of participants at each time point because an individual's trajectory can be computed on the basis of whatever data are available, as long as there are at least two data points. This is a significant advantage over repeated measures ANOVA, which requires roughly equivalent cell sizes at each time point to provide a valid result; with HLM, small cells and missing data do not prohibit analysis.

Hierarchical linear models are hierarchical because they involve first an assessment of individual-level change (Level 1), and second, a prediction of individual-level differences in change (Level 2).

Assessment of individual-level change. HLM first estimates individuals' change in trajectories as a function of time. Linear, quadratic, cubic, or other models can be fit as a function of time. A Wald Chi-Square test of significance was conducted to determine whether a linear, quadratic, or cubic model of change was most appropriate (Bryk & Raudenbush, 2002). The results of the Wald test indicated that the cubic and quadratic

models were not a significantly better fit for the data, so the linear model was retained for all subsequent analyses. Using client-rated working alliance as an illustration, the unconditional Level 1 model was:

$$(1) \quad \text{Alliance} = P0_i + P1_i (\text{time}) + E_{it}$$

The unconditional Level 2 model was:

$$(2) \quad P0_i = B0 + R0_i$$

$$(3) \quad P1_i = B1 + R1_i$$

The Level 1 model indicates each individual's score on the WAI as a function of his or her overall level of alliance at the time of testing ($P0$), his or her linear growth trajectory ($P1$), and his or her residual error (E) as it varies by time. To best determine the form of change being exhibited by the sample, the Level 2 model is unconditional, without including the effects of between person variables in the estimation (i.e. changes in alliance ratings as a function of attachment factors are not yet examined). Thus, the Level 2 model estimates individuals' intercept ($P0$) and linear growth (i.e., slope) terms ($P1$), as a function of the group average in each ($B0$ and $B1$ respectively) and individual variation in each ($R0$ and $R1$). The within sample variances of the intercept and slope are obtained and used to determine if individual variation (i.e., $R0$ and $R1$) should be retained in the model. It is important to note that even if the average intercept ($B0$) or slope ($B1$) is not significantly different from zero, significant variance terms indicate that there is significant individual variation in starting value (i.e., intercept) and change over time (i.e., slope).

Assessment of differences in individual-level change in alliance as a function of attachment predictors. Once the unconditional model was estimated for working alliance, the data were further analyzed by determining whether the intercepts, slopes, and linear terms

varied as a function of differences in the attachment style of therapists, the attachment dimensions of clients, and interactions between the two. The Level 1 model was the same as in the unconditional model, and the Level 2 model is expanded to include between person variables. The model is now *conditional* on these between person variables. With the addition of attachment factors as a predictor (using therapist attachment style for illustration), the Level 2 models were:

$$(4) P0_i = B00 + B01 (\text{Therapist Attachment}) + R0_i$$

$$(5) P1_i = B10 + B11 (\text{Therapist Attachment}) + R1_i$$

In the conditional Level 2 model, B00 represents the average intercept for the sample as a whole at the time tested, and B10 represents the average intercept for the linear slope of the line. B01 and B11 represent the mean difference between alliance ratings for those seen by secure and insecure therapists (therapist attachment effect) for the average intercept at time tested, and slope, respectively. Therapist attachment was coded dichotomously, with insecure therapists coded “1” and secure therapists coded “2”. R0 and R1 represent the random variation remaining in individual scores after including the effect of therapist attachment.

Six HLM models were run to test the hypotheses about the relationship between attachment factors and the development of the therapeutic alliance over time. Two models were run to test the relationship between therapist attachment style and working alliance; one testing the impact of therapist attachment style on client-rated WAI total scores over time, and one testing the impact of therapist attachment on therapist-rated WAI scores over time. Similarly, two HLM models were run to test the relationship between the eight dimensions of client attachment and working alliance, with one model testing the relationship between

client attachment and client-rated WAI scores over time, and one model testing the relationship between client attachment dimensions and therapist-rated WAI scores. Finally, two HLM models were run to test the impact of an interaction between client and therapist attachment on working alliance development over time, with one model testing the effect of the interaction on client-rated WAI scores over time, and one model testing the effect of the interaction on therapist-rated WAI scores over time. Robust standard errors were used in these last 4 models because of the large number of predictors (Roberts, 2005).

Chapter 4

Results

The results of the HLM analyses revealed no significant effects for any of the models testing therapist-rated WAI scores over time. Therefore, only models examining change in client-rated WAI scores over time are reported below.

The unconditional model assessing change in client-rated WAI scores over time with no predictors yielded a significant positive slope (see Table 1 and Figure 1), indicating that overall, working alliance shows linear improvement across the four measured time points during therapy. Once the unconditional model was run for client-rated WAI, the data were further analyzed by determining whether the intercepts, slopes, and linear terms varied as a function of differences in the attachment style of therapists, the attachment dimensions of clients, and interactions between the two.

Therapist attachment and client-rated WAI over time. The attachment style of therapists was significantly related to client-rated working alliance at the beginning of treatment and change in alliance ratings over time ($p < .044$; see Table 1 and Figure 2). At the first assessment point following session 2, secure therapist attachment was associated with lower client ratings of working alliance than both the unconditional model and alliance ratings of clients treated by insecurely attached therapists. At this same time point in the beginning of treatment, insecure therapist attachment was associated with client ratings of working alliance that were higher than both the unconditional model and ratings by clients treated by securely attached therapists. This result suggests that a therapist's attachment style may have significant effects on the quality of the working relationship in the early stages of therapy. Over time, however, a different pattern of results emerged. Both secure and insecure

therapist attachment were associated with different rates of change in alliance over time, with secure therapist attachment yielding a steeper slope and greater positive change in alliance than insecure therapist attachment such that by the last assessment point following session 14, clients being treated by securely attached therapists rated the working alliance as higher than both the unconditional trajectory of alliance and that of clients treated by insecurely attached therapists. Conversely, those clients being treated by insecurely attached therapists yielded ratings with a more shallow slope and less positive change in alliance over time such that by the last assessment after session 14, clients being treated by insecurely attached therapists rated the working alliance lower than those being treated by securely attached therapists. These results suggest that therapist attachment factors are also related to the development of alliance quality over time.

Client attachment dimensions and client-rated WAI over time. None of the subscales of the PAAQ were significantly related to the level of client-rated working alliance at the first assessment point following session 2, but two of the client attachment dimensions, lacking in memory and vulnerability, did positively influence change in alliance ratings over time (see Table 2 and Figure 3). The lacking in memory subscale of the PAAQ significantly influenced the trajectory of alliance over time ($p < .034$), while the vulnerability subscale had a marginal effect ($p < .057$). Contrary to our predictions, increases in the degree of vulnerability and lacking in memory were associated with a steeper trajectory of alliance development over time such that higher client scores on these two dimensions resulted in higher ratings of working alliance by the end of treatment. The coefficient for the vulnerability subscale was 0.26 (interpretable as an average increase of .26 of raw WAI score per one point increase in vulnerability), and the coefficient for the lacking in memory

subscale was 0.27 (interpretable as an average increase of .27 of raw WAI score per one point increase in lacking in memory). The results suggest that client attachment factors can significantly influence the development of the therapeutic alliance over time.

Interactive effect of therapist and client attachment on WAI over time. The addition of the interaction between therapist and client attachment to the unconditional model was not significantly related to client-rated WAI scores early in treatment or ratings of the alliance over time. This finding suggests that in this sample, a match or mismatch between attachment factors of therapists and clients did not significantly influence the quality of the working relationship over the course of treatment.

Chapter 5

Discussion

This study sought to examine the relationship between therapist and client attachment factors and the development of the therapeutic alliance. Overall, the results support the general contention that the attachment dynamics of therapists and clients do indeed have an influence on the development of the working relationship in therapy over time, although some of the results did not match some of our specific predictions.

With regard to our first set of predictions about the relationship between therapist attachment and alliance, two interesting results were found. As hypothesized, therapist attachment style was related to alliance formation in the early stages of therapy, but contrary to our prediction, clients treated by securely attached therapists reported lower ratings of working alliance following session two than clients treated by an insecurely attached therapist. Our second prediction regarding the relationship between therapist attachment and the development of the alliance over time was supported. Clients treated by a therapist with a secure attachment orientation demonstrated a greater rate of positive change in alliance ratings over time than those treated by insecurely attached therapists, ultimately resulting in higher ratings over the course of treatment. The finding that secure therapist attachment is associated with a stronger alliance over time is in concert with the preponderance of the literature reviewed above on the relationship between therapist attachment and the therapeutic relationship. It is likely that therapist characteristics identified by Ackerman and Hilsenroth (2003) as being associated with strong working alliances (e.g., flexibility, warmth, openness, trustworthiness, etc.) were more likely to be displayed by securely attached therapist in our study, thus explaining the steeper positive slope in client alliance ratings over

time. However, the finding that clients in our study rated the early (session 2) alliance higher when working with insecurely attached therapists was contrary to our prediction, but an exploration of the nature of the attachment system, as well as the interpersonal processes that might unfold in therapy, offers a possible explanation of this pattern of results, as described below.

In addition to influencing an individual's pattern of interpersonal behavior, attachment researchers have also demonstrated the attachment system's relevance to emotion regulation (Cassidy et al., 2009), describing the attachment system as one of dyadic emotion regulation facilitated by the childhood caregiver (Stroufe, 1996). Similar to caregivers, therapists can be thought of as playing a key role in the dyadic regulation of their client's emotions (Bowlby, 1988; Dozier et al., 1994; Tyrell et al., 1999). In the context of psychotherapy, the therapist has the task of helping clients to change their patterns of managing interpersonal situations and emotion regulation, with the goal being more adaptive functioning in these domains. Bowlby (1988) suggested that therapists must challenge and disconfirm the clients' existing internal models and expectations about relationships and emotions by providing a secure base in therapy and resisting the interpersonal "pull" to behave in ways that complement the client's expectations. It is possible that a therapist's own attachment style can contribute to their ability to successfully identify such interpersonal dynamics, and therefore affect their ability to provide a secure base and appropriately challenge a client's long-standing pattern of relating to others and managing emotional material. In their review of effective interpersonal approaches to psychotherapy, Pincus and Cain (2008) noted that therapists should avoid responding to clients in complementary ways in order to avoid reinforcing the client's maladaptive relational patterns and to inject a new

interpersonal influence into the therapeutic transaction. From the perspective of the client, the way a therapist responds to such dynamics is likely to have important consequences for the client's comfort in therapy, and is also likely to color the client's feelings toward the therapist. For example, a client who is interacting with a therapist who behaves in a manner that complements his or her expectations (i.e., does not resist the "pull" to behave in ways that confirm their maladaptive worldview) is unlikely to experience much additional distress or discomfort, as this is not different from how they experience most others. However, if a client's interpersonal expectations are challenged and confronted by a therapist who is able to recognize and resist the maladaptive interpersonal "pull", the dissonance created by such an interaction may indeed cause the client a certain degree of distress and lead to a less positive evaluation of the therapist and the therapeutic relationship, at least in the early stages of treatment. With respect to our findings, insecure therapists may be less able to recognize a client's interpersonal dynamics and act in appropriate, non-complementary ways, which may be less stressful for the client and therefore lead to higher client ratings of the early therapeutic relationship. Conversely, securely attached therapists may be better able to identify such dynamics and work more effectively to challenge a client's patterns (i.e., non-complementarity), which in turn causes more distress for the client and leads to lower ratings of alliance early in therapy. However, these issues of complementarity have important consequences for the progression of the alliance over time, and likely, the client's ability to change and experience symptom relief. Our findings demonstrate that this discrepancy in the alliance ratings of clients treated by secure and insecure therapists changes significantly over time, with clients treated by securely attached therapists ultimately rating the alliance significantly higher by the end of treatment. It may be that the very same non-complementary

behavior that leads to lower ratings of alliance early in therapy is in fact the mechanism by which therapists are facilitating greater change with their clients over time, and as a function of that, higher ratings of the alliance as treatment progresses. Future research could test this hypothesis by incorporating observations of therapist and client in-session behavior and directly measuring the relationship between attachment factors and interpersonal complementarity in therapeutic transactions.

With regard to our predictions about the relationship between client attachment and the development of the working alliance, a number of interesting results emerged. Contrary to our prediction, client attachment factors were not significantly related to client ratings of alliance at the beginning of treatment. One possible explanation of this finding relates to the changing nature of the therapeutic alliance over time (Luborsky, 1976), and the different emotional and interpersonal demands placed on the client as the phase of the relationship changes (Kanninen et al., 2000). Early in the therapeutic relationship, a client's perception of the alliance is likely to be largely influenced by the therapist's ability to provide a minimally caring and supportive environment, and therefore the lack of a significant relationship between alliance ratings and client attachment at this stage is not surprising. However, as therapy progresses and the client's maladaptive patterns are increasingly challenged, this can create increased distress for the client and place additional strain on the relationship over time. It is therefore possible that a client's attachment dynamics may be less relevant at the beginning of treatment and may become more salient under this increased distress in later stages of therapy.

Our prediction regarding the relationship between client attachment and the development of the alliance over time was partially supported, in that client attachment

factors did affect the trajectory of alliance development, but not in the direction predicted. We hypothesized that elevations on dimensions of client attachment associated with attachment security would contribute to increased ratings of the alliance over time, but the results were interesting and unexpected. Elevations on two PAAQ subscales associated with insecure attachment, lacking in memory and vulnerability, were associated with higher client ratings of alliance over time. It is important to note that previous research with this sample has demonstrated that five of the eight PAAQ subscales (i.e., childhood rejection/neglect, role-reversal/enmeshment, being loved, vulnerability, and lacking in memory) significantly differentiated GAD clients from non-anxious controls (Cassidy et al., 2009), but only vulnerability and lacking memory were significantly related to the alliance in the current study. It is interesting to note that these two subscales of the PAAQ tap “current state of mind with respect to attachment”, as opposed to childhood attachment experiences, and reflects the degree to which both positive and negative childhood attachment experiences are integrated into a coherent narrative that reflects a valuing of attachment (George, Kaplan, & Main, 1984; Main, Kaplan, & Cassidy, 1985). Research has demonstrated that current state of mind with respect to attachment is associated with many aspects of adult psychosocial functioning, and that the influence of current state of mind may be independent of the influence of childhood attachment experiences. For example, studies have demonstrated that adults appear capable of engaging in healthy relationships with an appropriately responsive other as long as their current state of mind is secure, even in the face of negative childhood attachment experiences (Paley, Cox, Burchinal, & Payne, 1999; Pearson, Cohn, Cowan, & Cowan, 1994). Although GAD clients have been associated with increased childhood rejection and neglect, increased role-reversal and enmeshment with the caregiver, and decreased perceptions of

being loved by the parent, these dimensions failed to demonstrate an influence on the slope of the alliance over time. This suggests that although these negative childhood experiences may contribute to the psychopathology of GAD, it does not preclude the possibility of these individuals forming strong therapeutic relationships as adults.

The specific finding that increases in clients' lacking in memory of childhood experiences were associated with higher ratings of alliance over time may have several possible explanations. Lacking memory for childhood attachment experiences is a characteristic associated with a dismissing attachment style (Hesse, 1999). Individuals with a dismissing attachment style attempt to minimize the importance of attachment relationships in their current social and emotional functioning, but when asked about them, tend to present their attachment figures in highly positive terms that are either unsupported or contradicted by other evidence from the childhood environment. Given this way of organizing one's attachment experiences, it is possible that a similar phenomenon is occurring in the context of therapy, and the higher ratings of alliance are in fact inflated ratings reflective of a dismissing style. This possibility has important consequences for clinical work with such clients, and suggests a situation in which clients may appear compliant and are over reporting the strength of the alliance, while actually experiencing ambivalence or negative feelings toward the therapist. If this is the case, it is possible that these clients may not be doing as well in treatment as they are representing. It is important to point out that such a discrepancy is speculation, but it could be investigated by examining other measures of functioning and symptomatology and testing whether these dismissing clients are actually doing worse with regard to psychopathology despite rating the alliance as strong. If future research supports

this hypothesis, clinicians would benefit from an understanding of this attachment factor as part of their conceptualization and clinical approach.

Alternatively, a second explanation of the finding that higher scores on the lacking in memory subscale of the PAAQ being related to higher alliance ratings is the possibility that this reflects a true inability to remember childhood attachment experiences. If this is the case, then it is possible that any negative childhood experiences are simply not interfering with the client's current ability to form a strong working relationship with his or her therapist.

However, this conclusion might explain the lacking in memory subscale having no relationship to alliance development, but not necessarily why elevations on this dimension would be associated with *higher* ratings of alliance over time, and therefore remains a question for future study. For example, future research employing the AAI would allow for an in-depth examination of the clients actual narrative reports of attachment experiences and provide details that may clarify whether the lack of memory is a true inability to recall events or is indicative of the dismissing style described above.

A third possible explanation for the lacking in memory finding might lie in an exploration of the factors that make up the Working Alliance Inventory (Horvath & Greenberg, 1989). The WAI is composed of three factors measuring perceived agreement on the goals of therapy, the tasks of therapy, and the strength of the bond formed between client and therapist. If clients who are high in lacking memory are dismissive of close bonds with others, it is possible that the bond aspect is simply less salient for them, and the task and goal dimensions of the WAI may be driving the higher WAI total scores over time. Although we only used WAI total scores in the current study, future research could explore this hypothesis

and test whether the attachment dimensions of the PAAQ differentially relate to the three factors of the WAI, and may help to shed additional light on our findings.

Reporting a lack of memory for childhood experiences has long been suggested to represent denial, repression, or suppression of negative feelings associated with childhood attachment figures and attachment-related loss (Fraley & Shaver, 1999; Freud, 1896). This denial or suppression may be a function of the clients in our study, and reflective of the nature of chronic worry and GAD. A large body of research and theory suggests that worry is associated with considerable cognitive avoidance and the prevention of distressing emotional material from being processed by individuals diagnosed with GAD (Sibrava & Borkovec, 2006; Borkovec, Alcaine, & Behar, 2002). It is possible that the lack of memory for childhood events may be a component of this cognitive avoidance, whereby memories and emotions associated with negative childhood experiences are avoided or suppressed via chronic worry. If this is the case, one possible explanation of our findings is that the increase in alliance ratings over time by our GAD sample may be concomitant with symptom relief over the course of therapy. In other words, as patients begin to experience improvement in their symptoms, they may be more likely to report a corresponding increase in the perception of the therapeutic relationship. If treatment is effective in reducing cognitive and emotional avoidance, this may lead to less dismissing of the relationship and explain the steeper slope in alliance strength at the later stages of therapy. At least two key analyses could provide support for this hypothesis. First, ongoing measurement of symptom severity over time would allow for the analysis of a possible parallel trajectory with alliance ratings over time. Secondly, re-assessment with the PAAQ at post-treatment could reveal potential decreases in

lacking in memory, and the possible related decreases in the dismissing stance toward the therapist.

In addition to lacking in memory, greater feelings of vulnerability in relation to the attachment figure were marginally associated with higher client ratings of alliance by the end of treatment. An individual who is highly vulnerable to negative feelings resulting from an attachment figure's criticism is likely to remain sensitive to criticism into adulthood. However, this sensitivity does not preclude the possibility that such an individual could form a healthy relationship with an appropriate, reliable, and supportive other. Because the vulnerable client's early attachment figure not only failed to provide a secure base, but also served as a source of distress, the ability of a therapist to provide a type of secure base in treatment may lead to the formation of a strong bond, and therefore, a better working alliance. Thus, a vulnerable client being treated by a therapist who creates a supportive, non-critical environment may be provided with the necessary atmosphere in which he or she may feel comfortable and safe, leading to higher ratings of alliance as the relationship develops. In other words, the more vulnerable they are, the more they may benefit from a positive therapeutic environment relative to those clients who do not endorse attachment vulnerability. In his writings on attachment in the process of psychotherapy, Bowlby (1988) noted that one of the important roles of the therapist is to behave in ways that disconfirm the client's usual expectations of others and to be careful not to act in ways that pull for confirmation of the client's beliefs about themselves and others. By disconfirming the client's expectation, the therapist may be able to facilitate a positive relationship, and more importantly, positive emotional change. It may be possible that such a process was taking place within our study, but this remains speculation. Future research employing observational coding procedures,

such as the Structural Analysis of Social Behavior (SASB; Benjamin, 1974), may be able to empirically answer such questions. An important caveat to these conclusions is the possibility that elevations on these attachment dimensions may be highly specific to individuals with GAD, and may not generalize to other forms of psychopathology or to the alliance–attachment relationship in general.

We also investigated the potential effect of an interaction between therapist and client attachment on the development of the working alliance, and no significant relationship emerged in the current study. Although we offered no specific hypotheses regarding the interaction between client and therapist attachment, a small number of studies have found significant interactions (Dozier, Cue, & Barrett, 1994; Tyrrell, Dozier, Teague, & Fallot, 1999). These previous studies have suggested that a match (or rather, a mismatch) between client and therapist attachment can facilitate a better therapeutic alliance because therapists would be less likely to act in ways that complemented the client’s maladaptive interpersonal and emotional strategies. No direct evidence of such an interactive effect was found in the current study. On the other hand, this lack of a significant interaction suggests that clients can form strong working alliances with their therapists regardless of the degree to which they are matched on attachment factors. However, as noted above, it is possible that some type of non-complementarity between therapist and client attachment could help to explain our finding that clients formed better alliances over time with securely attached therapists. Future research could further address this issue by exploring more specifically the mechanisms by which therapist and client attachment, and related interpersonal behavior, might influence the ongoing process of therapy.

The current investigation had a number of unique advantages over previous investigations of the link between attachment and alliance. The present study had the advantage of being the first to study the relationship between attachment and alliance in the context of a randomized controlled trial of psychotherapy. Because of the well-controlled design of the current study, it allowed us to isolate more clearly the relationship between attachment factors and alliance and rule out rival explanations, such as number of sessions, type of therapy provided, type of client psychopathology, and variations in the clinical setting, to name a few. In addition to these important issues of internal validity, the present study was also the first to examine the relationship between the specific attachment constructs assessed with the PAAQ and the development of the working alliance. Nearly all of the previous investigations on this topic examined client attachment as categorical rather than multi-dimensional, a practice that has the potential for overlooking more complex and subtle relationships between the facets of attachment theory and their relationship with the working alliance. Greater isolation of the specific attachment dimensions that affect alliance development allows for more specific relationships to be studied, and future research should incorporate this multi-dimensional approach.

The present study also had a number of important limitations. The number of therapists was small, and the number of clients being treated by each therapist was not equivalent. The relatively small number of therapists involved in this study limited the amount of variability seen in different therapist attachment orientations, and a larger and more diverse representation of clinicians may have yielded different results. Although the small number of therapists does not pose a problem for HLM analyses, it does suggest caution when generalizing beyond the current sample. It is also important to point out that

therapist attachment style was examined categorically in the current study, rather than multi-dimensionally. Thus, while the use of the AAI to determine therapist attachment serves as a strength in this study, the lack of specific dimensions limits our ability to examine more complex and subtle relationships between different aspects of therapist attachment and the development of the alliance, as well as possible therapist-client attachment dimension interactions. Another limitation of the current study was the use of self-report measurement of client attachment. Although the PAAQ has very good psychometric properties and correlates very highly with the AAI, the interview method is considered the ideal way of measuring attachment (Crowell et al., 1999) and the results should be considered in light of that caveat. Because the sample consisted only of adult outpatients diagnosed with GAD, caution should also be taken when generalizing the specific client attachment results beyond the current sample. While the current study demonstrates that client attachment may indeed be related to the development of alliance, the specific factors of lacking in memory and vulnerability may be unique to GAD patients, and the specific attachment dynamics of other forms of psychopathology may affect alliance development in different ways that need to be clarified by future research. It is also important to note that no significant relationships were found between attachment and *therapist-rated* working alliance in the present study. On the one hand, this finding does not necessarily undermine the clinical utility of our results given that numerous research studies have suggested that client-rated alliance is the more robust predictor of treatment outcome (Horvath & Symonds, 1991), and therefore understanding what variables moderate client-rated alliance may be more clinically informative. Nevertheless, it raises an interesting question about why no relationship emerged between therapist ratings of working alliance and attachment factors. Another important factor to

consider when interpreting the results of the current study is the fundamentally correlational nature of the design and analyses. Although it is possible that attachment may indeed have a causal influence on the development of the working alliance, it must be noted that attachment was not experimentally manipulated in the current study, and therefore firm conclusions about causality cannot be made. Finally, it is critically important to mention that the current study only examined the relationship between attachment and working alliance, and did not explore what influence these attachment factors had on the outcome of psychotherapy. Although the alliance has been shown to be a robust predictor of outcome in therapy, it is possible that attachment may moderate outcome in unique ways beyond its influence on the development of the alliance.

Despite these limitations, the present study has a number of important clinical implications. With regard to the therapist attachment findings, one issue highlighted by the current study is the need for therapists to be mindful of the influence of their own developmental and interpersonal traits on the process of psychotherapy. Although frequently overlooked when examining the factors that contribute to successful therapy, research suggests that a significant proportion of outcome variance can be attributed to therapist factors (Beutler, 1997). The finding from the current study that clients treated by securely attached therapists formed stronger alliances over time underscores this idea, and has interesting implications for practicing clinicians. In the wake of numerous empirical investigations establishing the importance of the alliance, researchers have begun efforts to design interventions aimed directly at helping therapists improve the quality of their working relationships with clients. Recently, Crits-Christoph and colleagues (Crits-Christoph, Connolly Gibbons, Crits-Christoph, Narducci, Schamberger, & Gallop, 2006) developed and

pilot tested an intervention termed Alliance Fostering Psychotherapy specifically designed to teach therapists techniques aimed at enhancing the quality of their therapeutic relationships with clients. Although this preliminary study was small in size, it yielded some support for the idea that focused training interventions can indeed positively influence a therapist's ability to form a strong alliance. Future research in this area may benefit from a consideration of our findings. For example, training that encourages therapists to increase their focus on and understanding of how their attachment related issues and interpersonal patterns influence the dynamics within the relationship may prove to be a critical factor in efforts to improve alliance quality, and ultimately, treatment outcome. The results from the present study also underscore the importance of incorporating a client's attachment into case conceptualization and the therapist's efforts to forge a strong working alliance. A more complete understanding of the ways in which a client is likely to approach relationships may have important consequences for the stance the therapist should take in session, and may offer insight into how best to negotiate client resistance and understand and manage alliance ruptures. Additionally, this study raises a number of interesting scientific and clinical questions regarding the concept of complementarity in client-therapist interactions as viewed through the lens of attachment theory, and we encourage further exploration in this area.

The current study provides additional evidence for the importance of attachment as a meaningful participant factor in the development of the therapeutic alliance. Given the significance of the working relationship between therapists and clients as a predictor of treatment outcome, additional research that seeks to uncover the factors that contribute to the development of the alliance is essential.

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Appendix A: Tables

Table 1. HLM Coefficients, Standard Errors, and Standard Deviations for Therapist Attachment Effects On Client-Rated Working Alliance.

<i>Fixed Effect</i>			
	Coefficient (SE)		
	Intercept	Linear Slope	Therapist Attachment Effects
Unconditional Model	207.77 (2.66)***	0.75 (0.14)***	
Conditional Model	212.85 (8.06)***	-0.05 (0.41)	0.62 (0.30)*
<i>Random Effect</i>			
	Coefficient (SD)		
	Intercept	Linear Change	
Unconditional Model	432.43 (20.79)***	0.42 (0.65)**	
Conditional Model	435.74 (20.87)***	0.34 (0.58)*	

* p. < .05, ** p < .01, *** p < .001

Table 2. HLM Coefficients, Standard Errors, and Standard Deviations for Client Attachment Effects On Client-Rated Working Alliance.

<i>Fixed Effect</i>			
	Coefficient (SE)		
	Intercept	Linear Slope	Client Attachment Effects
Unconditional Model	207.77 (2.66)***	0.75 (0.14)***	
Conditional Model	246.15 (38.75)***	-0.10 (1.81)	
Rejection/Neglect			-0.06 (0.34)
Loved			0.14 (0.26)
Role Reversal /Enmeshment			-0.20 (0.20)
Vulnerability			0.26 (0.13)****
Balancing/Forgiving			-0.16 (0.30)
Angry			0.15 (0.18)
Dismissing/Derogating			-0.16 (0.19)
No Memory			0.27 (0.12)*
<i>Random Effect</i>			
	Coefficient (SD)		
	Intercept	Linear Change	
Unconditional Model	432.43 (20.79)***	0.42 (0.65)**	
Conditional Model	394.53 (19.86)***	0.39 (0.62)**	

Note. Fixed effects with standard robust errors.

* $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .057$

Appendix B: Figures

Figure 1. Unconditional HLM model of client-rated working alliance over time

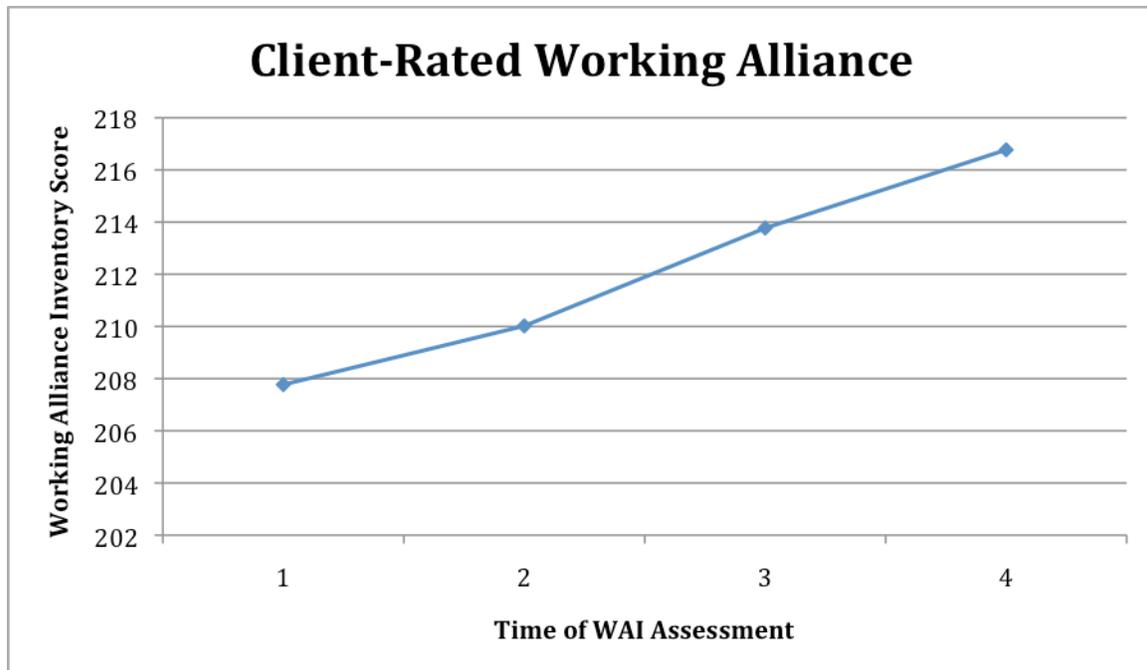


Figure 2. The effect of therapist attachment on client-rated working alliance over time

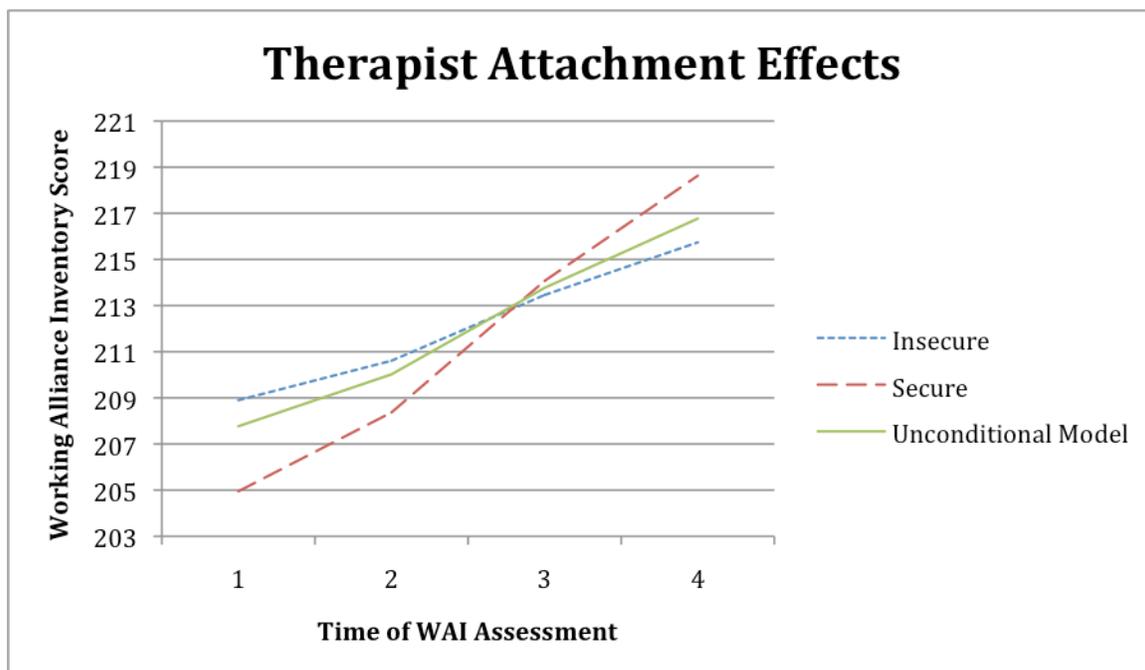
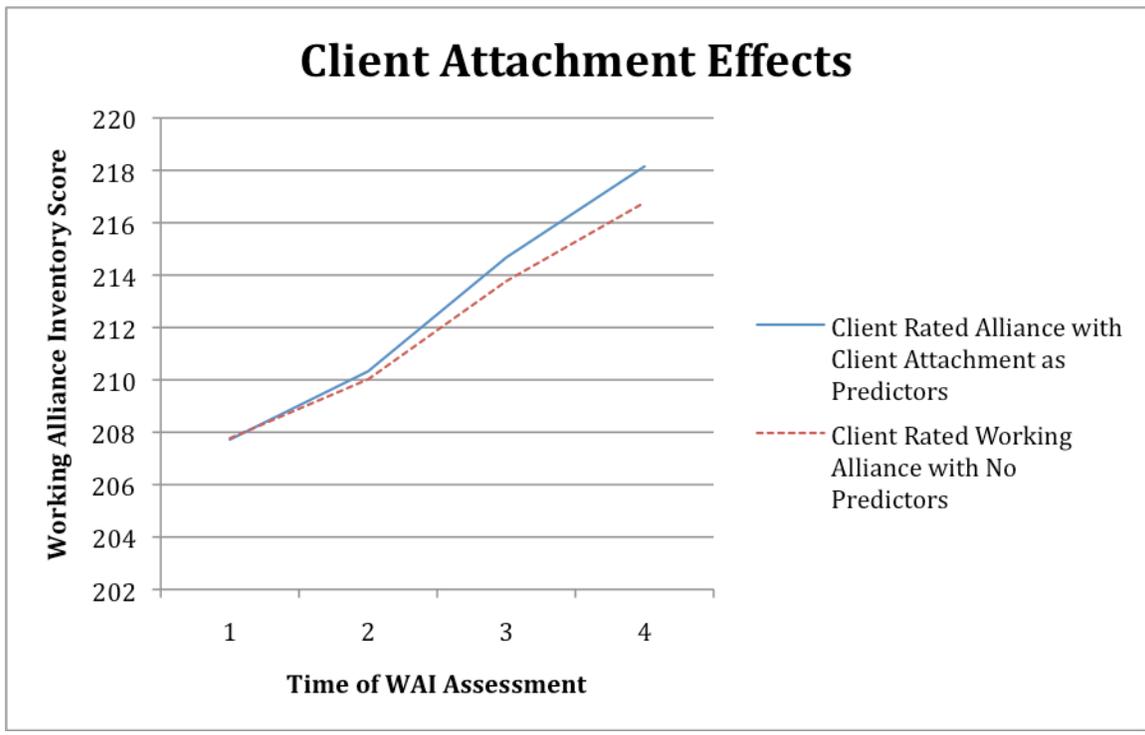


Figure 3. The effect of client attachment on client-rated working alliance over time



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