THERAPEUTIC ALLIANCE AS A MEDIATING FACTOR BETWEEN COUPLE ATTACHMENT AND THERAPEUTIC OUTCOME

Except where reference is made to the work of others, the work described in this thesis is my own or was done in collaboration with my advisory committee. This thesis does not include proprietary or classified information.

_____
Holly L. Whelchel

Certificate of Approval:

_____	_____
Leanne Lamke Professor Human Development and Family Studies	Scott A. Ketring, Chair Assistant Professor Human Development and Family Studies
_____	_____
Alexander T. Vazsonyi Professor Human Development and Family Studies	Stephen L. McFarland Acting Dean Graduate School

THERAPEUTIC ALLIANCE AS A MEDIATING FACTOR BETWEEN COUPLE ATTACHMENT AND THERAPEUTIC OUTCOME

Holly L. Whelchel

A Thesis

Submitted to

the Graduate Faculty of

Auburn University

in Partial Fulfillment of the

Requirements for the

Degree of

Master of Science

Auburn, Alabama
August 8, 2005

THERAPEUTIC ALLIANCE AS A MEDIATING FACTOR BETWEEN COUPLE ATTACHMENT AND THERAPEUTIC OUTCOME

Holly L. Whelchel

_____
Signature of Author

_____
Date

VITA

Holly L. Whelchel, daughter of Homer and Barbara Whelchel, was born October 11, 1980 in Valdosta, Georgia. Upon graduating salutatorian from Berrien County High School in 1999, she attend the University of Georgia and graduated Summa Cum Laude with a Bachelor of Science degree in Child and Family Development. Immediately following graduating, she entered Auburn's Marriage and Family Master's program in August, 2003. Holly will be marrying Adam Alford, son of Joe and Donna Alford, on July 16, 2005.

THESIS ABSTRACT

THERAPEUTIC ALLIANCE AS A MEDIATING FACTOR BETWEEN COUPLE ATTACHMENT AND THERAPEUTIC OUTCOME

Holly L. Whelchel
Master of Science, August 8, 2005
(B.S., The University of Georgia, 2003)

85 Typed Pages

Directed by Scott A. Ketring

The purpose of this thesis was to examine how the therapeutic alliance mediates the relationship between the anxiety and avoidance dimensions on a couple attachment measure and subsequent relationship satisfaction scores. The sample is derived from couples attending therapy at a marriage and family therapy training clinic at a southeastern university. It was found that the therapeutic alliance does not mediated couples' attachment and their relationship satisfcation scores. However, a positive relationship was found between females and males first and fourth session relationship satisfaction scores and between females and males therapeutic alliance scores and fourth session relationship satisfaction scores. Additionally, a negative relationship between males' anxiety and fourth session relationship satisfaction scores was found.

ACKNOWLEDGMENTS

I would first like to express sincere appreciation to Dr. Scott Ketring for his patience with me and the endless work put into my thesis. I would also like to express a special thanks to Dr. Hibbert for his help in analyzing the statistics. Finally, I would like to extend my appreciation to Adam and my family for their endless support and guidance. I would have not made it through this process if it was not for you.

Style manual used: Publication Manual of the American Psychological Association, Fifth Edition.

Computer software used: Corel Wordperfect 12, SPSS, AMOS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

I. INTRODUCTION

Zetel introduced the term *therapeutic alliance* and defined it as the "conscious collaborative aspect of the relationship which is based primarily on rational agreement between the therapist and client" (Horvath, Gatson, & Luborsky, p.249, 1993). The therapeutic alliance also has been defined as the attachment and collaboration between the client and the therapist (Platts, Tyson, & Mason, 2002). The alliance serves as a catalyst in which a client can express thoughts, emotions, and behaviors. It ultimately creates an environment that fosters the further development of collaboration, which is necessary in successful therapy (Horvath, 2000). A governmental report stated that the effectiveness of all types of therapy depended on the patient and the therapist forming a good working relationship and that the therapeutic relationship is the best single predictor of therapy outcomes (Department of Health, 2001). The report proclaimed that without establishing a good therapeutic alliance, it is less likely that therapy will be effective.

Some theorists have hypothesized that the alliance accounts for approximately 30% of client improvements (Lambert, 1992; Miller, Taylor, & West, 1980). Several studies have shown that the therapeutic alliance is positively related to changes in relationship satisfaction and symptom distress despite the type of therapy used, the length of treatment, and the experience level of the therapist (Dunkle & Friedlander, 1996; Horvath & Symonds, 1991; Kivlighan, Patton, & Foote, 1998; Marmar, Gaston,

Gallagher, & Thompson, 1989). Research has shown the therapeutic alliance contributing to the improvements in depression, anxiety, obsessive compulsive personality disorder, marital distress and marital satisfaction (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000; Bourgeois, Sabourin, & Wright, 1990).

The increasing importance of the therapy alliance has lead researchers to focus on factors affecting the establishment of the alliance. Previous research has not focused on client relationship factors impacting alliance effectiveness, particularly the client's fears and concerns about forming a hierarchical relationship which requires interpersonal exchanges (Eaton, Abeles, & Gutfreund, 1988; Kivlighan, Patton, & Foote, 1998). The dynamics of an interpersonal relationship requiring vulnerability and openness is the foundation for the alliance. Attachment, although individually focused, seems to impact relationship formation.

Attachment refers to the client's need for intimacy, trust in others, and freedom from the fear of abandonment (1998). Previous research characterized four distinct attachment styles: secure, preoccupied, dismissing, and fearful. (Brennan, Clark, & Shaver, 1998). However, current research suggests that attachment is more appropriately characterized as the underlying constructs of anxiety and avoidance (Shaver & Mikulincer, 2003). Collins and Read (1990) found three dimensions underlining attachment: the extent to which an individual is comfortable with closeness, feels he or she can depend on others, and is anxious or fearful about such things as being abandoned or unloved. Anxiety in close relationships is characterized by a fear of rejection, jealousy, fear of abandonment, a negative view of self, and a positive view of others. Anxious

individuals desire to become emotionally close very quickly and often cling to the other person. Avoidant individuals are uncomfortable with closeness, avoid intimacy, have a positive view of self and a negative view of others (Shaver & Mikulincer, 2003).

The four original attachment styles can be described in terms of anxiety and avoidance. Secure attachment style is described as being low on anxiety and avoidance while fearful attachment is described as being high on both anxiety and avoidance (Collins and Read, 1990). Preoccupied individuals have high levels of anxiety and low levels of avoidance while dismissing styles rate high on the avoidance scale and low ratings on the anxious scale(1990).

It is generally believed that the nature and quality of one's close relationships in adulthood are strongly influenced by attachment. A person's working attachment dimensions affect thoughts, feelings, and behaviors in relationships. Individuals entering new relationships carry working models which guide expectations, perceptions, and behaviors. A pattern of attachment, once developed, tends to persist over time so that individuals tend to place previous held relationship anxieties and avoidances onto new relationships. Because therapy is fundamentally an interpersonal process, it potentially represents an area for exploring the way in which the domains of attachment anxiety and avoidance may have an impact on the development of a working alliance (Satterfield & Lyddon, 1995).

The attachment of an individual continues to have major influences on adult social relationships and may be activated by any close, intimate relationship that evokes the potential for love, security, and comfort, including friendship, kinship, romantic

partnership, and the therapy relationship (Ainsworth, 1989). It is expected that the domains of attachment anxiety and avoidance would have the same effect on the therapeutic relationship as it does on other relationships (Mallinckrodt, Gantt, & Coble, 1995).

Attachment anxiety and avoidance that influence expectations of forming new relationships could shape a client's capacity to form a productive therapeutic alliance. Eames and Roth (2000) reported that individuals with anxious attachment style, rating high on anxiety and avoidance, had lower alliance ratings and those rating low on avoidance and anxiety had higher alliance ratings. Those with avoidant styles, rating high on avoidance and low on anxiety, had an improvement in alliance ratings over time (2000). Kivlighan, Patton, and Foote (1998) also found that the client's comfort with intimacy was related to a stronger alliance with the counselors. In addition, adults whose working models are characterized by a lack of trust and dependability in others were more likely to report poorer therapeutic alliance (Satterfield & Lyddon, 1995). However, all of these studies were done on individual therapy. Unfortunately little is known about attachment and alliance formation in couples therapy.

In addition, one's attachment affects the level of pretreatment symptoms. Studies revealed that those with high avoidance and anxiety entered therapy with more aggression and hostility while those with high avoidance and low anxiety exhibit more avoidant symptoms (Pianta, Egeland, & Adam, 1996). Those with high anxiety and avoidance had higher levels of psychological distress and overall higher symptom levels as compared to

those with low levels of anxiety and avoidance who displayed lower levels of psychological symptoms (Kemp & Neimeyer, 1999).

Research also shows that attachment is related to one's level of relationship satisfaction. Lower levels of anxiety and avoidance are associated with higher levels of relationship satisfaction (Levy & Davis, 1988; Pistole, 1990; Simpson, 1990). However, all of these studies only measured attachment and relationship satisfaction at the beginning of the study. None measured attachment and relationship satisfaction at a later moment in time, thus they did not look to see how attachment affects changes in relationship satisfaction.

Nevertheless the researcher did find one study that relates one's attachment to couple relationship satisfaction while taking into account the effects of first session relationship satisfaction scores on fourth session relationship satisfaction scores. Johnson (1997) found that males were more likely to be maritally satisfied at termination if they indicated higher levels of proximity seeking at intake. In attachment terms, the more secure attachment the male has at intake, the higher his relationship satisfaction was at termination (1997).

In summary, there is literature relating the therapeutic alliance to the therapeutic outcome in therapy. Studies have shown the therapeutic alliance to be an important factor relating to improvements in symptoms. In addition, the level of symptoms has been shown to affect the formation of the therapeutic alliance. Kivlighan, Patton, and Foote (1998) also noted that an individual's attachment needs have been found to be consistently related to the working alliance in individual therapy, a factor that itself has

been repeatedly related to the therapeutic outcome. It is evident that attachment is related to the formation of a productive therapeutic alliance in individual therapy and one's pretreatment symptom distress. There is literature supporting the relation between attachment and the ability to form a productive therapeutic alliance. There is also literature supporting a relationship between poor attachment and pre-treatment symptom distress in individual therapy. Furthermore there is literature supporting the relationship between attachment and relationship satisfaction.

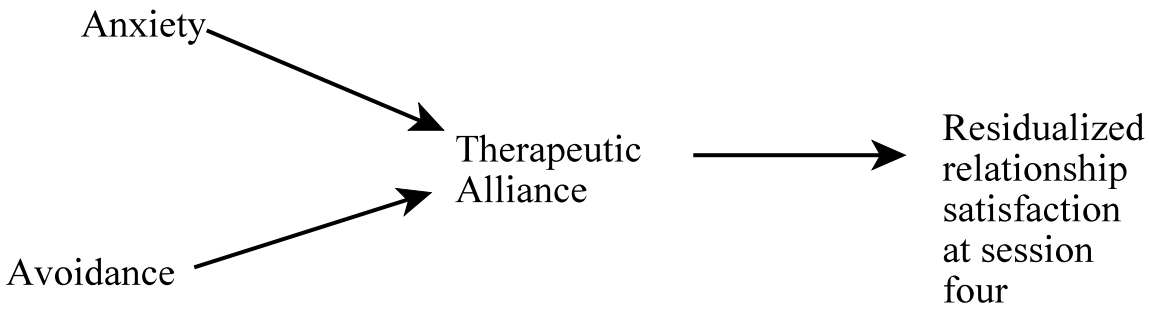
Although the relationships have been demonstrated in individual therapy there has not been a study which looks at client attachment in couples therapy. While theoretically it would be assumed that the client's attachment domains of anxiety and avoidance would impact therapeutic relationship formation and also relationship distress, however, the research is focused on attachment in individual therapy. There are no known studies that look at individual attachment affecting alliance formation in couples therapy. In addition, most of the studies mentioned only measure symptom distress, therapeutic alliance, or attachment at some point in therapy. These studies fail to take into account change in the therapy by taking into account symptom distress scores at time one and comparing them to the scores at time two to look at changes the individual or couple has made in therapy.

The researcher will attempt to build on Johnson's study by examining one's attachment and changes in couples' relationship satisfaction scores. Since there is literature relating an individual's attachment to one's ability to form a productive alliance and there is literature relating the therapy alliance to improvements in therapy outcomes, the researcher proposes that there is a relationship between attachment and therapy

outcomes. The researcher believes this relationship is mediated by the therapeutic alliance. If one's ability to form a productive alliance is affected by his/her attachment and the therapeutic alliance helps improve therapy outcomes, it can be assumed that if one forms a productive alliance then the alliance will have an effect on changes in couples' relationship satisfaction. As the therapist works to improve relationship satisfaction in couples therapy, the alliance should play a mediating role in the relationship between attachment and changes in relationship satisfaction.

Figure 1

Hypothesized Model



III. LITERATURE REVIEW

The notion of the therapeutic alliance has been around for several years. Thus, there exists a wide variety of research on this topic. Research is presented on how the therapeutic alliance affects changes in symptom distress and relationship satisfaction. Next, a discussion follows of how the therapeutic alliance can be seen as an interpersonal relationship and how one's attachment affects the formation of this relationship and pretreatment symptom distress. Lastly, attachment literature depicting how a person's cognitive models of self and others affect his/her relationships is discussed.

Therapeutic Alliance and Therapy Outcome

Several studies have shown that the therapeutic alliance is positively related to a positive change in symptom distress and relationship satisfaction despite the origin of therapy used or the length of treatment. Horvath and Symonds (1991) performed a meta-analysis on the results of 24 studies relating the therapeutic alliance to successful therapy outcomes. The meta analysis included a literature search of four data bases: PsycInfo, Medline, Dissertation Abstracts, and the Educational Resources Information Center (ERIC). The authors found a moderate association between a good therapeutic alliance and changes in symptom distress and relationship satisfaction.

To support these findings, Marmar, Gaston, Gallagher, and Thompson (1989) found the therapeutic alliance to be a predictor of outcomes in dynamic, cognitive, and

behavioral therapies. Sixteen men and 44 women with a mean age 67.07 years, who met criteria for major depressive disorder were randomly assigned to behavioral, cognitive, or brief dynamic therapy.

The Beck Depression Inventory (Beck, Steer, & Garbin, 1988) was used as the outcome measure along with the California Psychotherapy Alliance Scale (CALPAS; Gaston, 1990) as the alliance measure. The clients and therapists filled out the measures at the fifth, tenth, and fifteenth sessions and an average was taken of the scores. For the therapist version of the alliance questionnaire, cognitive therapy had a mean of .64, whereas behavioral therapy had a mean of.21 and dynamic therapy was .37. The means for the patient version of the alliance questionnaire were: cognitive therapy .36, behavioral, .40, and dynamic .19 (1989). The authors concluded that for the therapist version, the alliance was a better predictor of improvements in depression in cognitive therapy. The alliance also predicted improvements in depression in dynamic and behavioral therapies, just not as strongly. For the patient version, the alliance was not as predictive of improvements in depression in dynamic therapy as it is in cognitive or behavioral therapies. Overall, the results showed that the therapeutic alliance is a significant predictor of improvements in depression in different therapies.

Barber, Connolly, Crits-Chritoph, Gladis, and Siqueland (2000) performed a study and found the therapeutic alliance to be a predictor of symptom changes. Forty-six women (54%) and 42 men (46%) with a mean age of 38.4 years participated in this study. Eighty-six percent were white. The participants meet the diagnostic criteria for chronic depression (n=11), generalized anxiety disorder (n-44), or avoidant (n=19) or obsessive-

compulsive personality disorder (n=14). The patients received between 16 and 52 weekly sessions from psychodynamically trained therapists(n=15). Patients filled out the California Psychotherapy Alliance Score (CALPAS) (Gaston, 1990) at the end of the 2nd, 5th, 10th and each additional fifth session. The BDI (Beck Steer, & Garbin, 1988) was filled out at intake and termination as well as during each session.

A hierarchal multiple regression was used to assess predicted residualized subsequent change in depression from the session in which the alliance was assessed to the fourth month of therapy and at termination. In step one the number of treatment sessions and whether or not a person was in the chronic depression pilot study was controlled for. In step two, the residualized prior change in depressive symptoms from intake was assessed (2000). Step three the alliance scores were introduced. The results revealed a subsequent change in the patients' depressive symptoms at session two with a correlation of -.33 (n=83), at session five with a correlation of -.21 (n=88), and at session 10 with a correlation of -.32(n=78) (2000). To sum up the results, the higher the CALPAS score at sessions 2, 5, and 10, the greater the decrease in depression at each of these sessions.

So far the research has shown a positive relationship between the therapeutic alliance and improvements in symptom distress in individual therapy. Additionally, the therapeutic alliance also contributes to positive changes in couples. Bourgeous, Sabourin, and Wright (1990) studied the relationship between marital distress, therapeutic alliance formation, and treatment outcome in a group marital skills training program in which 63 couples met for nine weekly 3-hr sessions. The couples had a mean age of 38.5 and were

all French speaking, Canadians. The 13 therapists who provided therapy to the group were all licensed psychologists with six being trained in marriage counseling. Prior to the first session all couples completed the Dyadic Adjustment Scale (DAS; Spanier, 1976), the Potential Problem Checklist (PPCL; Patterson, 1976), the Marital Happiness Scale (MHS; Azrin, Naster, & Jones, 1973), and the Problem Solving Inventory (PSI, Heppner & Peterson, 1982). After the third session couples completed the Couples Therapy Alliance Scale (CAS; Pinsof & Catherall, 1986).

A week after the ending of treatment, the couples completed the four pretherapy measures again. Hierarchal multiple regression analyses were conducted in order to determine the contribution of the therapeutic alliance to improvements in relationship satisfaction. The results showed that the therapeutic alliance was an indicator of improvements in relationship satisfaction, more so for men than women (1990). For women, the therapy alliance accounted for 5% of the variance in the residualized post-DAS score (1990). For men, the quality of the therapeutic alliance accounted for 7% of the relationship satisfaction scores, 5% of the marital happiness scores, and 8% of the problem solving scores all of which were residualized scores. In sum, the therapeutic alliance mildly contributed to improvements in a variety of presenting problems.

Attachment

Although researchers are now studying the factors that contribute to successful alliance formation, previous research has failed to see relationship factors in the alliance related to the relationship organization of the client. The dynamics of an interpersonal

relationship requiring vulnerability and openness is the foundation for the alliance. How a person develops and interacts within relationships is related to a willingness for openness and vulnerability, which can be seen as affected by attachment.

Attachment refers to the client's needs for intimacy, trust in others, and freedom from the fear of abandonment (Kivlighan, Patton, and Foote, 1998). Current research suggests that adult attachment styles are better understood as a two-dimensional space that is continuous, rather than as distinct concepts. The two dimensions that underlie attachment styles are anxiety and avoidance (Shaver & Milulincer, 2003). Anxiety in close relationships is characterized by a fear of rejection, jealousy, fears of abandonment, a negative view of self, and a positive view of others (Collins and Read, 1990). Anxious individuals desire to become emotionally close very quickly and often cling to the other person. Avoidant individuals are uncomfortable with closeness, avoid intimacy, have a positive view of self and a negative view of others.

Attachment and Perception of Others

Differences in attachment appear to be rooted in cognitive models of self and others (Collins & Read, 1994). Support for this assumption is provided by several studies showing that adults with different attachment differ greatly in the way they view themselves and the social world. For example, Collins and Read (1990) conducted a study that examined the correlates of adult attachment. Participants in the study consisted of 406 undergraduates, 206 women and 184 men, at the University of Southern California. The mean age of the participants was 18.8. The researchers developed a 21-

item scale based on Hazan and Shaver's (1987) adult attachment descriptions called the Adult Attachment Scale (Collins & Read, 1990). Participants rated the extent to which each statement described their feelings on a scale ranging from one to five. The 21 items were factor analyzed using SPSS.

The researchers found that people with low anxiety and avoidance were higher in self-worth, more confident in social situations, and more self-assertive. Secure adults also had more positive beliefs about the social world, viewing others as trustworthy, dependable, and selfless. Those with a more anxious attachment measured low in self-worth, social self-confidence, and assertiveness, and they also had a more negative view of the world (1990). Avoidant adults tended to have a positive view of themselves indicated by high self-worth and assertiveness, although they viewed themselves as less confident in social situations and not interpersonally oriented (1990). These adults also had a negative view of human nature and thought of others as untrustworthy and not dependable.

In another study performed by Collins (1996), attachment differences in social perception were examined. Participants were 82 female and 53 male undergraduates from the University of Southern California with a mean age of 18.7. Participants completed three sets of material. First a background questionnaire consisting of the Adult Attachment Scale (Collins & Read, 1990) was completed. Next, participants responded to a relationship event questionnaire in which the participants wrote open-ended explanations for hypothetical relationship events and described how they would feel and behave in response to each event. Students responded on a seven-point scale. Third, the

student's attributions to the six events were measured by having the students rate the cause of the event along 10 standard attributional dimensions (Collins, 1996). Four items assessed the locus of the cause, two items assessed the nature of the cause, the three assessed the attributions about the partner's motives and intentions, and the remaining item rated to which extent the behavior was caused by the partner's negative attitude toward them, the participant. Each dimension was rated on a 7-point scale with higher scores representing greater assignment to that dimension.

Compared with those low on anxiety and avoidance, adults rating high in anxiety explained events in more negative ways and they reported more emotional distress and behaviors that were likely to lead to conflict (Collins, 1996). Those high in avoidance also provided negative explanations, but did not report emotional distress (1996). These findings were in support of the hypotheses. Collins (1996) performed a retest and the results were replicated.

Additionally, Mikulincer and Horesh (1999) conducted a study that examined attachment differences in the perception of others. The researchers tested the hypothesis that projective mechanisms, the tendency to see others parts of oneself, underlie these differences (1999). Participants included 70 undergraduates from Bar-Ilan University, 49 women and 21 men, ranging from 18 to 36 years old. In this study participants reported on their attachment with Hazan and Shaver's (1987) attachment descriptions and generated actual-self-traits- and unwanted self traits with the Selves Questionnaire. Two way and one way ANOVAs were conducted. Findings indicated that whereas anxious persons' impression formation, memory retrieval, and inferences about others reflected

the projection of their actual-self-traits, avoidant person's responses reflected the projection of unwanted-self-traits (1999).

The findings can be suggested to reflect an avoidant person's negative model of others. To explain, the study found that avoidant persons' perceptions of others are constructed around defensive projection (1999). Avoidant persons have been found to rely on repressive mechanisms and to actively avoid the recognition of personal faults. This avoidance of faults increases self-other incongruence and may fit their regulatory search for distance. Therefore, it can be concluded that avoidant persons' habitual tendencies to suppress personal faults and to maintain interpersonal distance may underlie the projection of unwanted-sel-traits (1999). The current findings are congruent with previous data mentioned that found differences in self-representation and perception of others. Mikulincer and Horesh expanded this concept to explore the cognitive functions behind these differences.

In sum, people who have low anxiety and low avoidance in their relationships may be predisposed to perceive others as loving and responsive. These individuals expect positive interactions with new people and may hold a global sense of self-worth in their relationship with them (1999). On the other hand, those having high anxiety or high avoidance may be inclined to perceive others as cold and rejecting and may feel worthless. As a result, individuals with different attachments differ in the way they experience their relationships.

Attachment and Relationships

These differences in how individuals with different attachments experience relationships can be found in a study by Simpson (1990) who examined the impact of attachment on romantic relationships. There were three hypotheses tested. The first hypothesis involved the nature of the relationship and predicted that those low on avoidance and anxiety would gravitate toward and develop stable, supportive relationships in which high levels of trust, interdependence, commitment, and satisfaction are evident; those who had high avoidance and low anxiety should develop emotionally distant relationships defined by lower levels of trust, interdependence, commitment, and satisfaction (1990). People who manifested high anxiety and high avoidance should exhibit considerable ambivalence toward their romantic partners (1990).

The emotions experienced within relationships characterized the second hypothesis. Those low on avoidance and anxiety should be involved in emotionally pleasant relationships characterized by frequent occurrences of mild and intense positive emotion and fewer occurrences of negative emotions (1990). High avoidance and high anxiety persons should exhibit the opposite pattern of emotions and a person high on anxiety and avoidance should be involved in effectively unpleasant relationships (1990).

The final hypothesis concerns the emotional distress following relationship dissolution. Simpson predicted that adults who exhibit high avoidance and low anxiety toward romantic partners should experience less emotional distress following relationship dissolutions and those who manifest high levels of anxiety and avoidance should

experience more intense distress. Those manifesting in low levels of anxiety and avoidance should be buffered against excess distress because of their positive mental models.

The hypotheses were tested in a longitudinal study involving 144 couples in an introductory psychology class at Texas A&M University. The mean age for men was 19.4 and for women it was 18.7. Attachment was measured by having each individual of the couple rate 13 sentences contained within the Hazan and Shaver (1987) adult attachment measure on Likert-type scales. Individual analysis revealed that different attachment characteristics tended to be associated with romantic relationships that differed in their qualitative nature (1990). People with low anxiety and avoidance were found to be involved in relationships characterized by higher levels of interdependence, trust, commitment, and satisfaction. Those who exhibited other dimensions, especially highly avoidant adults, tended to have relationships defined by the opposite set of features.

Additionally, attachment is strongly associated with different patterns of emotional experience within relationships. Adults having low anxiety and avoidance have relationships characterized by more frequent occurrences of positive emotion and less frequent occurrences of negative emotions, whereas those who are highly anxious and avoidant experience the opposite pattern (1990). Highly avoidant men tended to experience less prolonged and intense emotional distress following relationship termination.

Several studies have addressed relationship satisfaction and behavioral patterns

associated with different attachment dimensions. Pistole (1989) studied the issue of adult attachment in relation to conflict resolution and relationship satisfaction. Since conflict is a threat to the attachment concepts of availability of the partner and the availability of the relationship, persons with different attachment characteristics may handle important conflict within their relationships differently. In addition, people with different attachments could also be expected to experience different levels of relationship satisfaction (1989).

Pistole expected that those low on anxiety and avoidance would experience important conflictual issues as less threatening to the self while those high on anxiety and avoidance would experience conflictual issues as more threatening to the self. In addition, these adults were expected to be more able to "problem solve" their conflicts. These individuals could then be expected to use mutually focused tactics such as integration and compromise conflict resolution styles (1989).

Participants included 65 men and 82 women in an undergraduate psychology class. The majority were Caucasian. The participants had been involved in one or two important love relationships and were told to answer the questionnaires with their most important romantic relationship in mind. Hazan and Shaver's (1987) single item measure was used to classify individuals into an attachment style. The Rahim Organizational Conflict Inventory (ROCI; Rahim, 1983) measured conflict resolution and the Dyadic Adjustment Scale (DAS; Spanier, 1976) measured satisfaction and cohesion within the relationship.

Pistole (1990) found that compared with the highly avoidant and anxious and highly avoidant and low on anxiety, those characterized by low anxiety and avoidance reported higher relationship satisfaction and were more likely to use a mutually focused conflict strategy.

This finding replicated those of a previous study by Levy and Davis (1988). Levy and Davis found that the low anxiety and low avoidance was positively associated with satisfaction and mutually focused conflict strategies while the highly anxious and avoidant person was negatively associated with these features (1988). Together these studies support an association between attachment and evaluations of relationships, conflict behaviors, and the quality of marital interactions.

Attachment and Therapy Alliance

Several studies have shown that the operation of working models influences expectations of forming new relationships, which in turn influences a client's capacity to form a productive alliance. Eames and Roth (2000) investigated the relationship between attachment orientation in adult patients and the therapeutic alliance. Attachment was measured by the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) which is a 30-statement measure in which clients rate how well each statement fits their behavior on a five-point scale. The overall quality of the therapeutic alliance was measured with the Working Alliance Inventory (WAI; shortened version, Tracey & Kokotovic, 1989). The sample consisted of 17 women and 13 men white patients (N=30) who had a mean age of 34.7. Eleven experienced therapist, seven male and four female,

conducted therapy. Twenty-four of the patients received Cognitive Behavioral Therapy, three received Psychodynamic Therapy, one Cognitive Analytic Therapy, and two eclectic therapy (2000).

Immediately after the 2nd, 3rd, 4th, and 5th sessions, the patients filled out the RSQ and the WAI while the therapist also completed these measures. Correlation and multiple regression statistics showed individuals high in the anxiety and avoidance dimensions were associated with lower alliance ratings and those low on both dimensions were associated with higher alliance ratings (2000). This suggested that an attachment system characterized by anxiety toward forming a relationship and avoidance of intimacy may hinder alliance development. Those high on avoidance and low on anxiety were associated with improvement in alliance ratings over time (2000). Although anxious individuals have high anxiety about relationships, their high drive for intimacy enables them to develop an alliance over time while avoidant individuals deny their relationship formation difficulties. Clients with attachment anxiety and avoidance may initially have difficulties developing a positive relationship with their therapist.

Another study by Kivlighan, Patton, and Foote (1998) used the Working Alliance Inventory (shortened version, Tracey & Kokotovic, 1989) and the Adult Attachment Scale (AAS; Collins and Read, 1990) to test the client's attachment effects on the rating of the therapeutic alliance. Participants included 27 females and 13 males. Thirty-six were white and four were African Americans, and their ages ranged from 18 to 36 years with a mean age of 24 years (1998). The therapists were 17 female and 23 male with 85% being white and a mean age of 34 years. Clients were asked to participate in the study

and those interested completed the AAS at the first therapy session and the WAI at the third session. The authors found that the client's comfort with intimacy and their ability to trust and rely on others in times of need formed stronger alliances with their therapist (1998)

Similarly, Satterfield and Lyddon (1995) used the same measures to also study the relationship between the client's attachment and client's ratings of the therapeutic alliance. Sixty first time clients, 43 women and 17 men with 39 being white and the remaining African American, were given the AAS at the intake session and the WAI at the end of the third session. Thirty eight-graduate students served as the therapists. Demographics included 32 women and six men with a mean age of 27.60. Thirty-six of the counselors were white, one was African American, and one was Asian American. The results indicated that adults were more likely to report poor therapeutic alliances when their styles of relating involved a lacking sense of trust and dependability in others (1995).

Attachment and Pretreatment Symptom Distress

Attachment styles can also have an effect on pretreatment symptomatology. Adult attachment literatures support an association between attachment insecurity and psychiatric distress, with findings suggesting that adults with high avoidance tend to reveal less of themselves in therapy and demonstrate more aggression and hostility toward others (Pianta, Egeland, & Adam, 1996). On the other hand, individuals with high

anxiety and high avoidance report greater symptom levels overall, particularly increased anxiety and interpersonal problems (Kemp & Neimeyer, 1999).

Pianta, Egeland, & Adam (1996) conducted a study that examined the differences between individual adult attachment classification groups' self reported psychiatric symptomatology. The participants were 11 first time mothers characterized as high risk and multiproblematic because of frequent moves, exposure to repeated crises, domestic violence, histories of abuse and neglect in childhood, and generally disorganized life circumstances. The women had a mean age of 20.4 and the education mean was 11.0 years. The ethnicity of the participants was as follows: 55.6% white, 41.5% black, and 2.9% Native American or Asian. All mothers were administered the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher & Williams, 1992; Butcher et al., 1989) and the Adult Attachment Interview (AAI; George et al., 1985) was administered 1.5 years later. The researchers used an ANOVA analysis involving comparisons of the adult classification groups on the MMPI-2 validity and clinical scales. Results indicated that adults rating high on avoidance and low on anxiety reported comparatively little psychiatric distress, emphasized independence, and scored the lowest on self-reported anxiety (1996). The group rating high on both avoidance and anxiety rated the highest on a range of psychiatric symptoms indicative of self-perceived distress and relationship problems (1996).

Kemp and Neimeyer (1999) also conducted a study examining individual attachment and psychology symptoms and distress. After screening 1,157 individuals for identifiable attachment styles, the authors' sample consisted of 193 introductory

psychology students. The sample consisted of 76% white Americans, 9% Hispanic, 7% African American, 5% Asian and 3% other. Women made up 53% of the sample and the remaining 47% were men. The authors hypothesized individuals low in anxiety and avoidance would be associated with less distress and more adaptive coping after a stressful event, and over time, with fewer psychological symptoms (1999). Additionally, adults high in anxiety and avoidance were predicted to report high levels of symptoms after a stressful event and adults high in avoidance and low in anxiety were expected to report a greater number of avoidant symptoms of distress.

The participants first responded to a brief demographic survey. Next they wrote a narrative account of a stressful event and completed two questionnaires referring to that experience: the Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez, 1979; Zilberg, Weiss, & Horowitz, 1982) and the Ways of Coping scale (Folkman & Lazarus, 1985, 1988). Lastly, the participants completed a self-report measure of psychological symptomatology as experienced during the previous week, the Brief Symptom Inventory (BDI; Derogatis, 1992). Results concluded that compared to individuals rating low on anxiety and avoidance, individuals with high anxiety and high avoidance were associated with higher levels of intrusive psychological symptoms and higher levels of overall psychological distress (1999).

It is apparent that attachment not only affects the ability to form a productive alliance in individual therapy, but also influences a person's pretreatment symptomology. Reasons for this may be embedded in one's cognitive models of self and others. These models affect the quality of one's close relationships in adulthood and represent

characteristic ways of thinking about intimate relationships based on past experiences. Attachment characteristics influence an individual's formation of new relationships, such as the therapeutic alliance, and the characteristics of their relationships in many ways.

To summarize, there is extensive literature concerning the mild to moderate relationship between the therapeutic alliance and therapeutic outcome. It is also evident that attachment styles are related to the therapeutic alliance and pre-treatment symptomology in individual therapy. Expectations about the therapeutic relationship are influenced by the same working models a client applies to others in relationship with the self (Mallinckrodt, Gantt, & Coble, 1995). The working model of the client develops from previous attachment relationships and is transferred onto the relationship with the therapist (Horvath & Luborsky, 1993).

Attachment and Therapy Outcome

There is only one known study that examines attachment and therapy outcome in couples therapy. A study done by Johnson and Talitman (1997) examined client variables expected to predict success in Emotionally Focused Therapy. This study is also different from previous studies mentioned because it examines change across time in therapy. Other studies fail to take into account couple's first session assessments and only examine a particular variable at some point in therapy, not over several therapy sessions.

Subjects for the study were recruited through a newspaper ad. The ad described a research project for couples wishing to improve their relationship. The criteria for the subjects included cohabitation for at least one year, no drug or alcohol problems, a score

of 97 or less on the Dyadic Adjust Scale (DAS), (Spanier, 1976), and no previous psychiatric or psychological treatment in the past year. Thirty-six couples met the criteria and the average age of the couples was 42. The average length of relationship for these couples was 13 years while the average education level was 15.5 years. Thirteen doctoral therapists provided treatment to the couples. The couples received 12 free weekly therapy sessions.

Couples filled out the Couples Therapy Alliance Scale (CTAS; Pinsof & Catherall, 1986), the Dyadic Adjustment Scale (DAS; Spanier, 1976) to measure relationship satisfaction, the Miller Social Intimacy Scale to measure the level of intimacy being experienced in the current relationship (MSIS; Miller & Lefcourt, 1982), the Attachment Questionnaire to measure individual adult attachment (AQ; West, Sheldon, & Reiffer, 1987), the Relationship Trust Scale to measure interpersonal trust (RTS; Holmes, Boon, & Adams, 1990), and the Emotional Self-Disclosure Scale to assess how willingly individuals are to self disclose (ESDS; Snell, Miller, & Belk, 1988). All measures were filled out at intake and termination except for the Couple Therapy Alliance Scale which was filled out at the third session. All assessments were completed again at a three-month follow-up.

Pearson correlation coefficients were calculated to assess the relationship between couple predictor variables and marital satisfaction at termination and follow-up. Multiple regression analyses were then conducted for the variables found to be significantly correlated with marital satisfaction. The initial level of marital satisfaction was entered

first into the analysis followed by the predictor variables (i.e., attachment) in order to assess the contribution of the predictor variable beyond that of initial marital satisfaction.

The only attachment variable that predicted outcome was males' proximity seeking behaviors at intake (F= 6.48, p< 0.16), which accounted for 15% of the variance in marital satisfaction at termination. Males were more likely to be maritally satisfied at termination if they indicated higher levels of proximity seeking at intake. Female intake attachment scores were not significantly associated with female satisfaction levels at termination.

Although there is extensive literature relating attachment to pre-treatment symptom distress and the ability to form a therapeutic relationship in individual therapy, the literature has lacked in relating attachment to therapeutic outcomes and the therapeutic alliance, especially in couples therapy. Additionally, research has lacked in examining changes in relationship satisfaction in couples therapy. The current study will attempt to address this relationship and will examine changes in relationship satisfaction over the course of therapy.

Since there is literature relating an individual's attachment to one's ability to form a productive alliance and there is literature relating the therapy alliance to improvements in therapy outcome, the researcher propose that there is a relationship between attachment and therapy outcomes. The researcher believes this relationship is mediated by the therapeutic alliance. If one's ability to form a productive alliance is affected by their attachment and the therapeutic alliance helps improve therapy outcomes, it can be

assumed that if one forms a productive alliance than the alliance will have an affect on changes in couples' relationship satisfaction. As the therapist works to improve relationship satisfaction in couples therapy, the alliance should provide a mediator role between attachment and changes in the relationship.

The purpose for conducting this study is to expose therapists to specific influences on the therapeutic alliance such as the attachment dynamics of the therapeutic relationship. If a therapist knows about the effects of attachment on individuals and the therapeutic alliance, the therapist can incorporate his or her skills to help form a more productive alliance and thus help to improve outcome. Improved understand of the role the therapist plays with a client's attachment may provide useful information for the therapist in enabling them to build more effective relationships. An improved understanding of the interaction between attachment, the therapeutic alliance, and changes in symptom distress and relationship satisfaction will broaden our understanding of how clients interact with therapists in making change.

Hypotheses:

Hypothesis 1: Lower levels of anxiety and lower levels of avoidance will be associated with higher levels of couple relationship satisfaction following the fourth therapy session.

Hypothesis 2: Lower levels of anxiety and lower levels of avoidance will be associated with a more positive therapeutic alliance.

Hypothesis three: The positive therapeutic alliance will be associated with higher levels of relationship satisfaction.

Hypothesis four: The positive therapeutic alliance will mediate the relationship between anxiety and between avoidance and higher levels of relationship satisfaction following the fourth therapy session.

III. METHODS

Subjects

Over the last two years 179 females and 179 males in committed relationships have begun services at the MFT Center. Out of these clients 179 females and 179 males, 97 females and 97 males completed intake paperwork and attended at least four sessions becoming eligible to complete fourth session paperwork. Out of those, 62 females and 53 males had entirely completed paperwork at intake and at fourth session. This means 35 females and 44 males who attended at least four sessions did not complete the necessary paperwork. The retention rates for those who completed first and fourth session paperwork was 64% for females and 55% for males. Based on Miller and Wright's (1995) recommendation, an attrition analysis showed that females who remained in the study did not differ significantly from those who dropped out by anxiety (t = -1.12, $p \leq .05$), avoidance (t = -.54, $p \leq .05$), or relationship satisfaction scores at intake (t = -1.19, $p \leq .05$).

The same is true for males' intake scores of anxiety, avoidance, and relationship satisfaction. The males who remained in the study were not significantly different from those who dropped out on the variables of anxiety (t = 1.14, $p \leq .05$), avoidance (t = -.36, $p \leq .05$), or relationship satisfaction scores at intake (t = -1.13, $p \leq .05$). Further analyses showed that females who remained in the study and those who dropped out did not significantly differ in income (*chi square* = 9.26) or race (*chi square* = 4.47). In addition,

neither income (*chi square* = 8.45) nor race (*chi square* = 5.22) exhibited any differences between males who remained in the study and those who did not.

In this study, the 63 females and 52 males ranged in age from 18 to 53 years. There were 44 European American (EA) females (72.1%), 40 EA Males (75.5%), 7 African American (AA) females (11.5%), 6 AA males (11.3%), 5 Hispanic/ non-White females (1.6%), 1 Hispanic/non-White male (1.9%).

Reported annual household income for the clients ranged from less than $10,000 to $40,000 and higher. In the annual household income category of less than $10,000, there were 3.3% females and 7.5% males. Approximately 32.8% of the females and 11.3% of the males reported in the $10,000 to $20,000 range, 22.9% of females and 24.5% of males in the $20,000 to $30,000 range, and 14.7% of the females and 20.7% of the males were in the $30,000 to $40,000 range. The remaining 18.1% of the females and 20.7% of the males reported in the $40,000+ category.

Education of the subjects ranged from completion of grade school to the completion of a doctorate degree. Of those who completed information on highest level of education completed, 3.3% of the females and 1.9% of males graduated from high school or received a GED, 16.4% of females and 13.2% of males had completed a technical or an associate degree, 32.8% of females and 30.2% of males completed a bachelor or Master's degree, and 1.6% of females and 7.5% of males indicated an education of "other" (See Table 1).

Table 1:

Demographics of Individual Participants

	Females		Males	
Racial/ Ethnic Group	N	Percent	N	Percent
White/Non-Hispanic	44	72.1	40	75.5
African American	7	11.5	6	11.3
Hispanic/ Non-White	1	1.6	1	1.9
Education Level Completed	N	Percent	N	Percent
High School/ GED	2	3.3	1	1.9
Tech/ Assoc Degree	21	16.4	18	13.2
Bachelor/Master's Degree	20	32.8	16	30.2
Other	1	1.6	4	7.5
Income	N	Percent	N	Percent
Less than $10,000	1	3.3	4	7.5
$10, 001-$20,000	9	32.8	6	11.3
$20,001-$30,000	14	22.9	13	24.5
$30,001-$40,000	9	14.7	11	20.7
Over $40,000	11	18.1	11	20.7

Table 1 continued

Age	N	Percent	N	Percent
18-29	25	40.9	23	41.8
30-39	12	19.6	14	26.4
40-49	4	6.4	7	13.3
50+	1	1.6	4	7.6

Procedure

Data from adult couple's files who received services between April, 2002, to February, 2004, from Auburn University Marriage and Family Therapy Center (MFT Center) were utilized in this study. Couples who completed the intake information define a primary couple client. The Auburn University MFT Center is accredited by the Commission on Accreditation for Marriage and Family Therapy Education and is staffed by student therapists in training and MFT faculty. The center provides services to East Alabama residents. Therapy is frequently supervised live by the MFT faculty. Video taping of sessions is also frequently used.

Information was collected from self-report questionnaires completed by clients at the intake session and after completion of the fourth session. Informed consent was obtained from the clients before administrating the assessments. Confidentiality was assured to the clients regarding the data collected in the questionnaire, as well as information obtained in the therapy process.

Measures

Therapeutic alliance. The Couple Therapy Alliance Scale (See Appendix C), a self-reported tool designed to assess client's perceptions of their relationship with their therapist, created by Pinsof and Catheral (1986), was used to measure the therapeutic alliance. The CTAS consists of three sub-scales that contain 29 statements that measure bonds (n=10 items), tasks (n=13 items), and goals (n=6 items). Statements such as “The therapist does not understand me”, and “My partner feels accepted by the therapist,” are found in the bonds sub-scale. The task sub-scale has statements such as “The therapist

has the skills to help my partner and me," and "The therapist is not helping my partner and me." The goal's sub-scale contains items such as "The therapist is in agreement with the goals that my partner and I have for ourselves as a couple in this therapy," and " The therapist does not understand the goals that my partner and I have for ourselves in therapy."

The format of each scale requires the clients to rate the extent to which they agree or disagree with a series of statements about the various features of the alliance (1986). The ratings are made on a 7- point Likert type scale, ranging from completely agree (7) to completely disagree (1), while (4) corresponds to a neutral position. Half of the statements are phrased positively while the other half are phrased negatively. Reverse scoring is used on the negatively phrased statements on each sub-scale and then a sum is taken of all the scores in order to obtain a total score. The authors report test-retest reliability of r=.84 (1986). Heatherington and Friedlander (1990) analyzed the internal consistency of the instrument and reported an alpha level of .93 for the total score. The alpha levels for the bonds, tasks, and goal's sub-scales are .85, .88, .70 respectively. Content validity is the only form of validity that has been established for this scale as reported by Pinsof and Catherall (1986). The total scale is used as the measure of the therapeutic alliance in this study, unless noted otherwise. The alpha for the CTAS with the current participants of interest was .96 for both females and males.

Revised Dyadic Adjustment Scale (RDAS). The RDAS (See Appendix B) is an updated version of the Dyadic Adjustment Scale developed by Spanier in 1976. The RDAS is a 14-item questionnaire that measures marital adjustment (Busby, Christensen, Crane, & Larson, 1995). It contains three sub-scales, consensus (1-6), satisfaction (7-10),

and cohesion (11-14). Scores on the consensus scale can range from 0-30, scores on the satisfaction scale range from 0-20, and scores on the cohesion scale can range from 0-19. The higher the score the more cohesion, satisfaction, and cohesion a couple displays, thus indicating better marital adjustment.

Construct validity and criterion validity has been established for the updated RDAS. The reliability coefficients demonstrate that the RDAS has internal consistency and split-half reliability. The Cronbach's alpha, Guttman and Spearman-Brown split half reliability coefficients for the total RDAS scale are .90, .94, and .95 respectively. The Cronbach's alpha for the consensus, satisfaction, and cohesion sub-scale are .81, .85, and .80 respectively. The consensus, satisfaction, and cohesion sub-scales have Guttman split half reliability of .88, .88 and .79 and a Spearman-Brown split-half reliability of .89, .88, and .80, all respectively (Busby, Christensen, Crane, & Larson, 1995) The alpha for the R-DAS with the current participants of interest was .85 for females and .87 for males.

Experiences in Close Relationships (ECR). (See Appendix A) The Experiences in Close Relationships (ECR) was developed to measure attachment in adult relationships (Brennan, Clark, & Shaver, 1998). The authors took all the known assessments that measured attachment and using factor analysis derived two 18 item sub-scales. Each of the items is rated on a seven-point scale. The ECR consists of two sub-scales, avoidance and anxiety. The avoidance sub-scale assesses the avoidance of intimacy, discomfort with closeness, and self-reliance. All of these items are odd numbered. The anxiety sub-scale measures preoccupation, jealousness/fear of abandonment, and the fear of rejection. Scores for each of the sub-scales are calculated by reverse scoring certain items, and calculating the mean of each sub-scale.

Scores, which can range from 0-7 on both sub scales, can then be translated into attachment styles. Secure clients will score low on both avoidance and anxiety. Fearful clients will score high on both avoidance and anxiety. Preoccupied clients will score low on avoidance and high on anxiety. Dismissing clients will score high on avoidance and low on anxiety. The sub-scales have high internal consistency and a reliability of .94 for the avoidance scale and a .91 for the anxiety scale. The alpha for the Anxiety subscale of the ECR with the current participants of interest is .92 for females and .93 for males while the alphas for the Avoidance subscale are .92 for females and .89 for males.

Distributions and Transformations

The distribution of all variables for females and males was examined to verify that each one exhibited normal distribution. All measures were normally distributed with minimal skewness (see Tables 2 and 3).

Table 2

Distributions of Variables for Females

	AVOID	ANXIET	RDAS1	RDAS4	CTAS
Mean	51.56	70.76	29.77	35.71	219.95
SD	20.54	22.31	9.47	9.32	34.92
Skewness	.30	- .60	-.35	-1.01	-.05
Kurtosis	.12	.75	.40	1.53	-.88

Table 3

Distribution of Variables for Males

	AVOID	ANXIET	RDAS1	RDAS4	CTAS
Mean	68.98	69.63	37.30	41.21	225.02
SD	10.397	23.82	9.51	7.34	33.53
Skewness	-.93	-.13	-.55	.46	.02
Kurtosis	3.12	-1.05	.47	-.24	-1.12

IV. RESULTS

Plan of Analysis

Studies testing for mediation effects can be challenging. Problems can arise from operational definitions and statistical strategies. Part of this controversy surrounds the distinction between indirect and mediated effects. Some consider an indirect effect to be a mediated effect (MacKinnon, 2000; Maruyama, 1998), while others distinguish between the two (Holmbeck, 1997). In this study we operationalized a mediator as the "generative mechanism through which the focal point independent variable is able to influence the dependent variable of interest" (Baron & Kenny, 1986, p.1173). For a variable (Therapeutic alliance) to be considered a mediator, the variable must account for the relationship between the predictor (couple attachment) and criterion variable (relationship satisfaction) (Holmbeck,1997). Therefore, there must be a relationship between attachment and changes in couple relationship quality in the first place. The literature review presented that anxious and avoidant attachment styles are related to relationship quality. In this study, mediator effects will be found when a path from couple attachment to changes in relationship satisfaction in the direct effect model is replaced or modified by the therapeutic alliance.

The proposed model assumed that the "therapeutic alliance" acts as a mediating variable between "couple attachment" and "relationship satisfaction." The two predictor

variables are couple attachment and therapy alliance and the criterion variable is relationship satisfaction, with couple attachment and relationship satisfaction being measured at time one, and the therapeutic alliance and relationship satisfaction measured at time two. This is done to determine if factors such as attachment affect the relationship between the therapeutic alliance and relationship quality. Our objective was to determine the relationship between these variables as they interacted during therapy.

To do this the data will be analyzed in a mediated model using AMOS 4.0 (Arbuckle, 1999) to estimate the relationships. First, a correlation matrix will be used to determine if relationships between the variables are correlated. If all variables are correlated then the researchers will continue with the analysis. Next, a general model will be analyzed without the influence of the mediating variable for both females and males separately. A second model will estimate the mediator effects for both females and males. The proposed model consists of the therapeutic alliance acting as a mediator between the attachment sub-scales of anxiety and avoidance and the levels of relationship satisfaction exhibited after four sessions of therapy. A third analysis or multi sample model will estimate the mediator model for females and males constrained together. The model will propose that males and females are equal in their scores. If males and females do not demonstrate similar outcomes then the model fit indices will significantly worsen.

Females and males are measured separately to maintain the assumption of independence. Because the participants are related to each other, it could violate the statistical assumption of independence if we measured them jointly. Once they are measured separately, these two groups are constrained to verify if in fact they demonstrate

similar outcomes within the same model.

Because relationship satisfaction at intake is a major contributor to relationship satisfaction at fourth session there is a need to control for the impact of these scores on fourth session relationship satisfaction. This is essential because the intake relationship satisfaction scores account for 34% and 26% of the explained variance for fourth session relationship satisfaction scores of females and males respectively. To control for the effect of intake relationship satisfaction these scores were regressed onto the relationship satisfaction scores at fourth session and the residual was extracted. The residual from the regression equation represents the amount of variance left over after parceling out the amount of explained variance from intake relationship satisfaction. The residual score is used as the new relationship satisfaction variable.

Path Analysis

In order to analyze the mediator model the following variables had to be correlated: anxiety and avoidance and relationship satisfaction, anxiety and avoidance and the therapy alliance, and the therapy alliance and relationship satisfaction. Following a bivariate analysis, anxiety and avoidance were found not to be related to the therapy alliance for both females and males. For avoidance the correlations were r = -.092 for females and r= -.008 for males while anxiety resulted in correlations of r= -.120 for females and r= -.070 for males (See Tables 4 and 5). Because there was no relationship found between anxiety and avoidance and the therapeutic alliance the mediator or indirect effects cannot be examined. However, the researcher examined the direct effects using a path analysis.

Results for Females (See Table 4)

The bivariate analysis revealed that anxiety and avoidance were correlated (r = .242). As expected, the therapeutic alliance was positively related to changes in relationship satisfaction (r = .332). Females' avoidance scores were negatively related to first session relationship satisfaction scores (r= -.364). This indicated that the higher females' avoidance at intake was, the lower their relationship satisfaction scores at intake. Females' anxiety was non significantly related to first session relationship satisfaction (r= -.056) Females' anxiety (r = -.317) and avoidance (r = -.424) were both negatively related to fourth session relationship satisfaction scores. The higher the female's anxiety and avoidance at intake, the lower their relationship satisfaction scores. However, when controlling for the effects of intake relationship satisfaction scores on fourth session relationship satisfaction scores, the relationship was non-significant. Neither anxiety (r =-.183) nor avoidance (r = -.114) were related to changes in relationship satisfaction.

Table 4

Correlation Matrix for Females

	AVOID	ANXIET	RDAS 1	RDAS4	CTAS
AVOID					
ANXIET	.242**				
RDAS1	-.364**	-.056			
RDAS4	-.424**	-.317*	.602**		
CTAS	-.092	-.120	.143	.378**	
Residual RDAS	-.114	-.183	.000	.799**	.332*

**p≤.01
*p≤.05

Results for Males (See Table 5)

For males, anxiety and avoidance were related (r = .242). Male anxiety was negatively related to intake relationship satisfaction at intake(r = -.227) while male avoidance was positively related to intake relationship satisfaction (r = .221), both relationships being significant. This indicated that the higher the male's anxiety at intake, the lower the relationship satisfaction scores were at intake. On the other hand, the higher male's avoidance scores were at intake, the higher their relationship satisfaction scores were at intake. As expected males' changes in relationship satisfaction were significantly related to the therapeutic alliance (r = .470). This indicates that the higher the therapy alliance scores, the more the relationship satisfaction scores change. Only the anxiety dimension of male attachment was significantly related to fourth session relationship satisfaction scores (r = -.341). Furthermore, when controlling for the effects of intake

relationship satisfaction on fourth session relationship satisfaction, male anxiety was negatively related to changes in relationship satisfaction (r = -.282).

Table 5

Correlation Matrix for Males

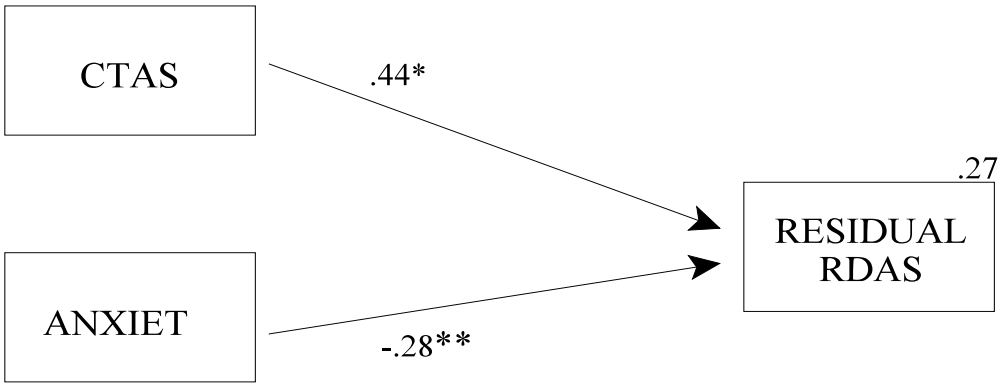
	AVOID	ANXIET	RDAS1	RDAS4	CTAS
AVOID					
ANXIET	.337**				
RDAS1	.221**	-.227**			
RDAS4	.159	-.341*	.514**		
CTAS	.008	-.070	.312*	.519**	
Residual RDAS	.076	-.282*	.000	.858**	.470**

**p≤.01
*p≤.05

The researcher further examined the significant relationships between the therapy alliance and changes in relationship satisfaction and between male anxiety and changes in relationship satisfaction by using a path analysis to examine the direct effects between the variables. The path analysis demonstrated that the therapeutic alliance was related to changes in relationship satisfaction (Beta= .44, p≤.01) and male anxiety was negatively related to changes in relationship satisfaction (Beta= -.28, p≤.05) (See Figure 2). These results indicated that the higher the therapy alliance scores were, the higher the changes in relationship satisfaction scores. Furthermore, the higher the male's anxiety at intake, the lower the changes in relationship satisfaction scores. The direct effect model accounted for 27% of the variance.

Figure 2

Direct Effect Model for Males



*p≤.01
**p≤.05

V. DISCUSSION

Summary of Findings

The major finding in the current study was that attachment was not related to the alliance or relationship satisfaction. In fact the therapy alliance is the only consistent contributor to change in relationship satisfaction. When looking at the two constructs of attachment for males and females, only male anxiety at intake was negatively related to change in relationship satisfaction (Beta= -.28, $p \leq 05$). The higher the males' anxiety scores, the less change in relationship satisfaction. Additionally, as expected the therapeutic alliance contributed to both females' and males' higher relationship satisfaction scores at fourth session.

When examining the correlation matrix, both females and males' anxiety and avoidance was related to relationship satisfaction at fourth session. This finding is consistent with the literature. Previous literature concluded that individuals in intimate relationships that experience lower levels of anxiety and avoidance experience higher levels of relationship satisfaction. For example, Simpson (1990) found that those individuals characterized by high avoidance and anxiety had lower levels of relationship satisfaction. In addition, Levy and Davis (1988) found that adults characterized by high anxiety and avoidance had lower levels of relationship satisfaction while those with low anxiety and avoidance had higher levels of relationship satisfaction. Pistole (1990)

replicated those results and found that adults characterized by low anxiety and avoidance reported higher levels of relationship satisfaction. However, all of these studies only measured attachment and relationship satisfaction at intake and did not measure changes in relationship satisfaction.

However, when controlling for the effects of relationship satisfaction at intake on relationship satisfaction at fourth session, the relationship between anxiety and avoidance and relationship satisfaction disappears for both females and males. The only relationship is the negative relationship between males' anxiety and changes in relationship satisfaction. This indicates that just looking at an outcome variable at some point in therapy results in different results than when taking into account change from the beginning of therapy to a certain number of therapy sessions. The studies' outcomes depend on whether or not the researchers take into account change of the outcome variable rather than just ascertaining the relationship with later measurements of well- being. Most of the studies referenced in this research only measured the outcome variable at some point in therapy. This could explain the difference between this study's findings and previous studies' findings.

The results in this study supported the results found by Johnson and Talitman (1997). These researchers found that higher levels of males proximity seeking at intake indicated higher marital satisfaction at the end of therapy, when controlling for marital satisfaction at intake. It could be that proximity seeking is measuring the opposite effect that the current study is measuring in high anxiety. High anxiety scores could possibly make it so the participant does not seek proximity in the relationship. Further replicating

Johnson and Talitman's (1997) results, females' intake attachment scores were not associated with changes in relationship satisfaction at termination. Because of the current study's results, hypothesis one which stated that lower levels of anxiety and lower levels of avoidance will be associated with higher levels of relationship satisfaction was only partially supported. The current study supported that the male subscale of anxiety is negatively related to relationship satisfaction at fourth session.

In addition, this study fails to find a relationship between one's attachment and the therapeutic alliance for both females and males. In contrast, all of the previous studies indicate there is a relationship between an individual's attachment and the therapeutic alliance. Several studies show that one's attachment is related to one's ability to form a productive alliance. Eames and Roth (2000) found that individuals with an attachment system characterized by anxiety toward forming a relationship and avoidance of intimacy may hinder alliance development. They also found that adults high on avoidance and low on anxiety reported with improvement in alliance ratings over time (2000). In another study, Kivlighan, Patton, and Foote (1998) discovered that the client's comfort with intimacy and their ability to trust and rely on other in times of need helped to form a stronger alliance with their therapist. Additionally, Satterfield and Lyddon's (1995) findings indicated that adults are more likely to report poor therapeutic alliances when their styles of relating involved a lacking sense of trust and dependability. However, this study did not support Hypothesis 2 which states lower levels of anxiety and avoidance will be associated with a positive therapeutic alliance. Because there is no relationship between attachment and the therapeutic alliance, Hypothesis 4 which stated that the

therapeutic alliance mediates the relationship between the attachment dimensions was not tested.

As expected, Hypothesis 3 was supported in the study, both for females and males. For females, there was a positive relationship between females' changes in relationship satisfaction scores and the therapeutic alliance as indicated by r =.378. The higher females' therapeutic alliance scores, the higher their changes in relationship satisfaction scores at fourth session. This indicated that there is a positive relationship between a positive therapeutic alliance and more change in relationship satisfaction.

For males, the therapeutic alliance was positively related to changes in males' relationship satisfaction scores with r =.470. This finding indicated that the higher males' therapeutic alliance scores, the more change in their relationship satisfaction scores. This finding supported Bourgeous, Sabourin, and Wright's (1990) finding that the therapeutic alliance was an indicator of improvement in relationship satisfaction when controlling for the effects of relationship satisfaction at intake.

In addition, the results supported previous findings that the therapeutic alliance is positively related to a positive change in therapy outcomes. Horvath and Symonds (1991) found that there is a moderate association between a good therapeutic alliance and changes in relationship satisfaction. In the current study, the therapeutic alliance was found to be positively associated with improvements in levels of relationship satisfaction for both females and males.

Explanation of Results

The literature suggests that the attachment a person forms with their partner is the

same as the attachment that is formed with the therapist. A person's working attachment models affect thoughts, feelings, and behaviors in relationships. Individuals entering new relationships carry working models which guide expectations, perceptions, and behaviors. A pattern of attachment, once developed, tends to persist over time so that an individual will tend to impose previous relationship models on new relationships. Mallinckrodt, Gantt, & Coble (1995) claim that expectations about the therapeutic relationship are influenced by the same working model of self and others a client applies to close personal relationships. However, in the current study it appears that the avoidance and anxiety an individual has in their romantic relationships is not the same as the avoidance and anxiety one forms with the therapist and it also does not appear to affect the change in relationship satisfaction scores. Based on the attachment literature one would expect that if a person experiences high levels of avoidance or high levels of anxiety in relationships that they would also feel that way in a therapeutic relationship. However, the current study's results did not indicate this.

This may be because the current study examined attachment with an individual measure and the therapeutic alliance with a couple measure. The attachment measure (ECR) looks at how an individual responds to others when in intimate relationships. The CTAS looks at the individual's relationship with the therapist and what they believe is their partner's relationship with the therapist. It could be possible that the relationship type questions could be confounding the relationship between the anxiety and avoidance variables and the therapy alliance scale. However, additional analyses demonstrated that

when taking out the relationship items from the CTAS and using strictly individually oriented items that the relationship between these two scales did not improve.

A further explanation could be that the questions on the ECR are more geared toward how one feels in an intimate relationship. For example, the researcher reexamined the ECR and found that the majority of the questions related specifically to romantic relationships such as "I often want to merge completely with romantic partners, and this sometimes scares them away," "I am nervous when partners get to close to me," and "Sometimes I feel that I force my partner to show more feeling, more commitment." These questions might not be accurately measuring the anxiety or avoidance one forms toward the therapist. How a person feels in an intimate sexual relationship might not transpose to a therapeutic relationship, especially when their partner is present in the therapy process. This partnership could be nullifying the effect of anxiety and avoidance on which might account for why there was no relationship found between female and male anxiety and avoidance and the therapeutic alliance.

The researcher may also have measured the CTAS so early in therapy that an accurate appraisal of the person extending their anxiety or avoidance onto the therapist was not done in this study. It is possible that only four sessions of couples therapy may not have been enough time for the client to form an intimate relationship with the therapist and thus implant their adult attachment styles. It might be that couple's therapy never really requires an intimate relationship to be formed with the therapist which would impact whether the therapist elicits attachment anxiety or avoidance from the client.

Another major contributor to the contradictions may be the fact that most of the previous studies concentrated on individual therapy. In individual therapy, the relationship is between the client and therapist. It seems logical that an individual's attachment dimension would be a factor in forming a relationship with the therapist. However, in couples therapy the relationship with the therapist may be different. In individual therapy the relationship is about the client and the therapist and in couples therapy the relationship is about the dyad. For instance, the couple's alliance with each other may be more important than the therapist/couple alliance (Pinsof, 1995). Additionally, Symonds and Horvath (2004) found that partners' mutual agreement about the strength of their alliances with the therapist rather than their individual assessments were important in predicting a positive outcome in therapy. When the partners were in mutual agreement about the direction of the alliance as therapy progressed, this better predicted positive therapeutic results. However, if partners are in distress with each other, it would appear they would be less likely to see their partner's point of view on any issue or topic. However, this still does not explain why attachment was not found to be related to relationship satisfaction.

It may also be possible that couple's therapy is impactful enough to transcend the effects of attachment problems and change the interaction within the couple unit. For instance, in the bivariate analysis females' anxiety and avoidance were related to fourth session relationship satisfaction. For males, only anxiety was related to fourth session relationship satisfaction. However, when controlling for relationship satisfaction scores at intake, the relationship disappeared except males' anxiety was still related to changes in

relationship satisfaction. It might be that couples therapy impacts attachment issues for couples who are making small and large strides for change. If this is the case then there would be no relationship between relationship anxiety and avoidance and the alliance. Secondly, the alliance would help nullify the relationship between anxiety and avoidance and relationship changes.

In addition, therapy calls for disclosure of one's problems. Hurtful feelings may be disclosed. This could actually cause more anxiety for the couple, which could explain why male anxiety was negatively related to first and fourth session relationship satisfaction scores. Also, males may take longer to become comfortable in the therapy room to where they disclose their true feelings. Measuring relationship satisfaction after four sessions may be a time where males' anxiety is higher than usual. It could be that relationship satisfaction and the therapeutic alliance was measured too early in the study. Additionally, an avoidant female or male will be more likely to view their partner more negatively and avoid attempts in therapy to become closer and more intimate with their partner. They may be so focused on placing the blame for relationship problems onto their partner that they do not focus on the relationship with the therapy. So any problems within therapy are the result of their partner's unwillingness to change. Maybe they are still externalizing to their partner their issues of anxiety and avoidance. The therapist is not wrapped up in the attachment quagmire.

As in any study, retention rates could also be confounding the results. For instance, the current study's retention rate was lower than the majority of the other studies' retention rate. The retention rates for those who completed first and fourth

session paperwork was 64% for females and 55% for males. If the current study had a higher retention rate, results might have been different.

Because of the low retention rates, sample size is affected. The sample size in the current study may also be confounding the results. However when compared to other studies, the current sample size was compatible with the sample sizes in other studies. However, the other studies were mainly studies of individuals in therapy. It is easier to maintain assessments in individual therapy than in couples' therapy. For example, one partner may drop out while the other continues with therapy. When this happens, the other partner's view of the therapeutic alliance is not available to assess along with their relationship satisfaction.

Additional Analysis

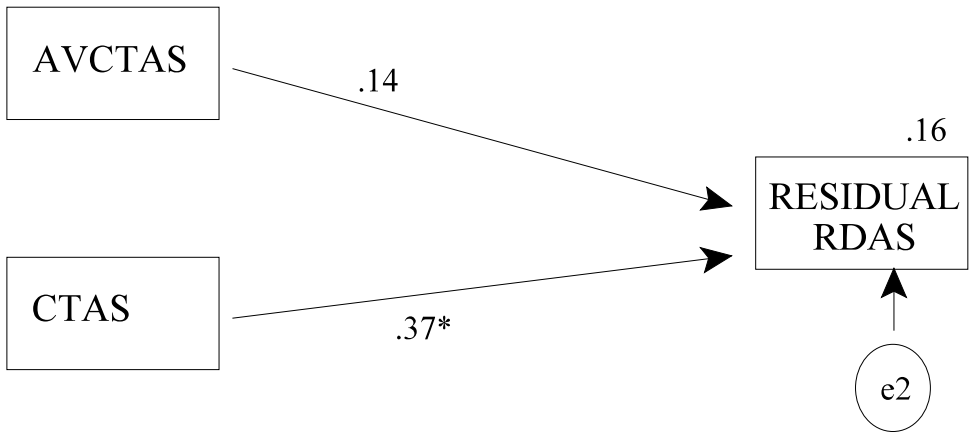
Since anxiety and avoidance were found to be related to first and fourth session relationship satisfaction for both females and males but anxiety and avoidance was not related to the therapy alliance, the researcher speculated that there might be an interaction effect between attachment and the therapy alliance. Furthermore, the therapy alliance was found to be related to first, fourth, and change in relationship satisfaction. Since both attachment and the therapy alliance are related to relationship satisfaction but neither are related to each other, there could possibly be an interaction between the two variables. It might be that when examined separately the two variables are not related but when examining the interaction between the two variables, their interaction could have an effect on changes in relationship satisfaction. The researcher examined the interaction of anxiety

and the therapy alliance, avoidance and the therapy alliance and their relationship with changes in relationship satisfaction.

To do this the research created two new variables using SPSS. The new variables consisted of the interactions between anxiety and the therapy alliance and avoidance and therapy alliance. The new variables were first tested in a bivariate analysis using SPSS to test to see if the new variables were correlated with changes in relationship satisfaction. The analysis revealed that there were no interaction effects for females. Thus, a direct model could not be analyzed for females. For males, the interaction between avoidance and the therapy alliance was related to changes in relationship satisfaction ($\underline{r} = .424$, $p \leq 01$). Next a direct effect model was analyzed in which the new variable of the interaction between avoidance and the therapy alliance was placed within the direct model and analyzed using AMOS. Results revealed a positive relationship between males' therapy alliance scores and changes in relationship satisfaction (Beta= .37, $p \leq .05$). However there was no relationship between the interaction of male anxiety and the therapy alliance and changes in relationship satisfaction (See Figure 3). The whole model accounted for 16% of the variance. This result did not further explain the results of the current study.

Figure 3

Direct Effect Interaction Model for Males



*p≤.05

Strengths

While this study has its limitations, it also contributes to previous research as mentioned above. Additionally, it extended the limited research on couples therapy, the therapeutic alliance, therapy outcome, and attachment. This study opened more doors for research in couples therapy focusing on the issue of attachment. For instance, although attachment does not appear to be related to alliance there could be some explanations to this finding. The first could be sample size. Additionally, paper-pencil measurements of

attachment may be flawed in trying to capture adult attachment. People may not answer the questions truthfully, they may mark more than one answer for a question, or they may skip questions. This makes it harder to form an accurate score. More needs to be done to verify the relationship between attachment measures and therapeutic outcomes. It might be that attachment scores have very little relationship with therapy outcome in comparison to other client variables like relationship satisfaction, individual psychopathology, and conflict.

The current study also contributed to research by analyzing change in therapy outcome (i.e., relationship satisfaction) from intake to fourth session while controlling for the effects of intake relationship satisfaction on fourth session relationship satisfaction. This study also examined anxiety and avoidance at intake and then connected it to therapy outcomes while taking into account the variance of intake. Very few studies on couples therapy do this.

Limitations

A major limitation of this study was that it used a small sample size. Ninety-two males and females started therapy but attended less than four sessions. Only 63 females and 63 males completed both intake and fourth session paperwork. Out of these clients, 63 females and 52 males completed all necessary intake and fourth session paperwork. It could be quite possible that those people who dropped out of therapy had an interaction between attachment and alliance or relationship satisfaction and did not continue. However, the current researcher did try to control for this by comparing drop-outs with non drop-outs. Since such a small number of participants for which data was collected for

both partners, there was increased difficulty for the researcher to find significant results due to limited power. Therefore, the limited sample size created challenges in finding the significant results that could really exist.

Additionally, this study lacked generalizability to other ethnic groups in various geographic locations. In this case, 44 of the females are Caucasian and 40 of the males are Caucasian, and all participants live in the south-east. The experience of these individuals may be different due to cultural, societal, and religious influences. All of these factors can impact the attitudes, perceptions, and behaviors of the participants, which may not apply in different parts of the United States. Therefore, the sample should not be generalized to other ethnic groups.

Another limitation was that this data is based entirely on self-report. Therefore, the findings only include the information that respondents are willing to share. There also exists the possibility that the questions used in the study are influenced by social desirability. This could potentially confound our results, particularly since clients may feel a desire to answer a question in a way that they feel may be socially desirable.

Lastly, this study did not examine other factors could contribute to changes in relationship satisfaction. Other factors could possibly be the improvements in the couple's conflict strategy, communication style, or sexual relationship.

Future Research

Although this study has a number of limitations, it offered valuable information regarding factors that influence a more positive therapeutic alliance and changes in couples' levels of relationship satisfaction. As this study illustrated, when looking at

change over therapy, the relationship between relationship satisfaction and attachment is different. When controlling for the effects of intake relationship satisfaction on fourth session relationship satisfaction, the relationship between the variables disappeared except for males' anxiety. Further research should include more studies that look at change in therapy since this study contradicts previous studies' findings that only looked at the outcome variable at one point in therapy.

In addition it would also be important to further explore the role the therapeutic alliance plays in increasing the levels of relationship satisfaction and what role attachment plays in this interaction. This will help therapists know how to improve therapy outcomes with couples.

Future research should include a larger number of couples in order to test for how couple factors may influence findings. Researchers may consider analyzing how i.e. male anxiety in relationships may influence female attachment to the therapist. This interaction may be significant in understanding how the interaction of male and female attachment styles affect their respective therapeutic alliances and changes in relationship satisfaction. Furthermore, investigation of why there maybe no significant relationship between changes in female relationship satisfaction and anxiety is also needed because there was a relationship for males. One direction would be to examine the instrument used to measure one's attachment dimensions. There could be the possibility of the measure being more sensitive to a particular gender. For instance, further investigation is needed of whether or not the anxiety subscale is more sensitive to males since this study found that higher male

anxiety was related to lower levels of relationship satisfaction. This could help therapists better understand the role attachment plays in changes in couples' relationship satisfaction.

III. References

Ainsworth, M.D.S. (1989). Attachments beyond infancy. *American Psychologist, 44*, 709-716.

Arbuckle, J.L. (1996). Full information estimation in the presence if incomplete data. In G.A. Marcoulides & R.E. Schumaker (Eds.), *Advanced structural equation modeling: Issues and techniques* (pp. 243-277). Mahwah, N.J.: Lawerence Erlbaum Associates.

Arbuckle, J.L. (1999). Amos 4.0 [Computer Software]. Chicago: Smallwaters.

Azrin, N., Naster, B., Jones, R (1973). Reciprocity counseling: A rapid learning based procedure for marital counseling. *Behavior Research and Therapy, 11,* 365-382.

Baron, R.M., & Kenny, D.A. (1986).The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51,* 1173-1182.

Barber, J.P., Connolly, M.B., Crits-Christoph, P., Gladis, L., & Siqueland, L. (2000). Alliance predicts patients' outcome beyond in-treatment change in symptoms. *Journal of Consulting and Clinical Psychology, 68,* 1027-1032.

Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77-100.

Benjamin, L.S. (1982). Use of structural analysis of social behavior (SASB) to guide intervention in psychotherapy. In J.C. Anchin & D.J. Kiesler (Eds.), Handbook of interpersonal psychotherapy, pp 190-212, New York: Pergamon.

Benjamin, L.S. (1983). The INTREX user's manual, Part I and II. (Madison, WI: INTREX Interpersonal Institute, Inc.)

Bentler, P.M., & Bonnett, D.G., (1980). Significant tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88,* 588-606.

Beutler, L.E., Machado, P.P.M., & Allstetter Neufeldt, S.A. (1994). Therapist variables. In B.A. & S.L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (pp.229-269). New York: Wiley.

Bourgeois, L., Sabourin, S., Wright, J. (1990). Predicitve validity of therapeutic alliance in group marital therapy. *Journal of Consulting and Clinical Psychology, 58,* 608-613.

Brennan, K.A., Clark, C.L., & Shaver, P.R. (1998). Self report measurement of adult attachment: An integrative overview. In J.A. Simpson & W.S. Rholes (Eds.), Attachment theory and close relationships. (pp. 46-76). New York: Gulford Press.

Busby, D.M., Christensen, C., Crane, D.R., & Larson, J.H. (1995). A revision of the dyadic adjustment scale for use with distressed and nondistressed couples: Construct hierarchy and multidimensional scales. *Journal of Marital and Family Therapy, 21,* 289-308.

Butcher, J., Dahlstrom, W.G., Graham, J. Tellegen, A. & Kaemmer, B.(1989). *MMPI-2: Manual for Administration and Scoring*. (Minneapolis: University of Minnesota

Press).

Butler, J. & Williams, C. (1992). *Essentials of MMPI-A interpretation.* (Minneapolis: University of Minnesota Press).

Carnelley, K. B., Janoff- Bulman, R. (1992). Optimism about love relationships: general vs specific lessons from one's personal experiences. *Journal of Social and Personal Relationships*, 9, 5-20.

Collins, N.L. & Read, S.J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*, 644-663.

Collins, N.L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology, 71*, 810-832.

Cutrona, C. E., & Russell, D. W. (1987). The provisions of social relationships and adaptation to stress. In W. H. Jones & D. Periman (Eds.), *Advances in personal relationships* (Vol. 1, pp. 37-67). Greenwich, CT: JAI Press.

Department of Health. (2001). *Treatment choice in psychological therapies and counseling.* DOH Publication No. 23044. London: HMSO.

Derogatis, L.R. (1977). *The SCL-90R Manual 1: Scoring, administration, and procedures for the SCL-90.* Baltimore: John Hopkins University School of Medicine, Clinical Psychometrics Unit, 1977.

Derogatis, L.R. (1992). BSI: *Administration, scoring, and procedures manual-II.* (Baltimore: Clinical Psychometric Research.)

Dunkle, J.H. & Friedlander, M.L. (1996). Contribution of therapist experience and personal characteristics to the working alliance. *Journal of Counseling Psychology, 43*, 456-460.

Eames, V. & Roth, A. (2000). Patient attachment orientation and the early working alliance-a study of patient and therapist reports of alliance quality and ruptures. *Psychotherapy Research, 10,* 421-434.

Eaton, T.T., Abeles, N. & Gutfreund, M.J. (1988). Therapeutic alliance and outcome: Impact of treatment length and pretreatment symptomatology. *Psychotherapy, 25*, 536-542.

Feeney, J. A., & Noller, P. (1992). Attachment style and romantic love: Relationship dissolution. *Australian Journal of Psychology*, 44, 69-74.

Folkman, S. & Lazarus, R. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology, 48,* 150-170.

Folkman, S. & Lazarus, R. (1988). *Manual for the ways of coping questionnaire: Research edition.* (Palo Alto, CA: Consulting Psychologists Press).

Foreman, S. & Marmar, C.R. (1985). Therapist actions that address initally poor therapeutic alliances in psychotherapy. *American Journal of Psychiatry, 142,* 922-926.

Gaston, L. (1990). The concept of the alliance and its role in psychotherapy: Theoretical and empirical considerations. *Psychotherapy*, 27, 143-153.

Garfield, R. (2004). The therapeutic alliance in couples therapy: Clinical considerations. *Family Process,43*,457-465.

George, C., Kaplan, N. & Main, M. (1985). *Adult Attachment Interview*. (Unpublished manuscript, University of California, Berkeley)

Griffin, D., & Barholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K. Bartholowmew & D. Perlman (Eds.), *Advances in personal relationships, attachment processes in adulthood* (Vol. 5, pp. 17-52).

Grotstein, J. S. (1990). The contribution of attachment theory and self-regulation theory to the therapeutic alliance. *Modern Psychoanalysis*, 15, 169-184.

Hazan, C. & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.

Heatherington, L. & Friedlander, M.L. (1990). Couple and family therapy alliance scales: Empirical considerations. *Journal of Marital and Family Therapy, 16,* 299-306.

Heppner, P.P. & Peterson, C.H. (1982). The development and implications of a personal problem-solving inventory. *Journal of Counseling Psychology, 29,* 66-75.

Higgins, E.T., Klein, R. & Strauman, T.J. (1985). Self concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. *Social Cognitions, 3,* 51-76.

Holmbeck, G. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology, 65,* 599-610.

Holmes, J.G., Boon, S.D., & Adams, S. (1990). The relationship trust scale. Unpublished manuscript, University of Waterloo, Waterloo, Canada.

Horvath, A.O. (2000). The therapeutic relationship: From transference to alliance. *Journal of Clinical Psychology/In Session: Psychotherapy in Practice, 56*, 163-173.

Horvath, Gatson, L. & Luborsky, L. (1993). The therapeutic alliance and its measures. In N.E. Miller, L. Luborsky, J.P. Barber, & J.P. Docherty (Eds.), Psychodynamic Treatment Research: A Handbook for Clinical Practice, (pp.247-273). New York: Basic Books.

Horvath, A.O. & Greenberg, L.S. (Eds.) (1994) *The working alliance: Theory, research, and practice.* New York, NY.: John Wiley & Sons, Inc.

Horvath, A.O. & Symonds, B.D. (1991). Relations between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*, 139-149.

Horowitz, M.J., Wilner, N., & Alvarez, W. (1979). Impact of Events Scale: A study of subjective distress. *Psychosomatic Medicine, 41,* 208-219.

Hubble, M.A., Duncan, B.L., & Miller, S.D. (Eds.). (1999). The heart and soul of change: What works in therapy. Washington, D.C.: APA.

Johnson, S.M. & Talitman, E. (1997). Predictors of success in emotioanlly focused marital therapy. *Journal of Marital and Family Therapy, 23,* 135-152.

Kemp, M.A. & Neimeyer, G.J. (1999). Interpersonal attachment: Experiencing, expressing, and coping with stress. *Journal of Counseling Psychology, 46,* 388-394.

Kivlighan, D.M. Jr., Patton, M.J. & Foote, D. (1998). Moderating effects of client attachment on the counselor experience-working alliance relationship. *Journal of Counseling Psychology, 45*, 274-278.

Kogot, E. (2001). *The contribution of attachment style to cognitions, affect, and behavior in achievement settings*. Unpublished PhD dissertation, Bar-Ilan University.

Lambert, M.J. (1992). Implications of outcomes research for psychotherapy integration. In J.C. Norcroos & M.R. Goldstein (Eds.), *Handbook of Psychotherapy Integration* (pp. 94-129). New York: Basic Books.

Lambert, M.J. & Brown, G.S. (1996) Data-based management for tracking outcome in private practice. *Clinical Psychology-Science & Practice, 3,* 172-178.

Lambert, M.J., Hansen, N.B., Umpress, V., Lunnen, K., Okiishi, J., Burlingame, G.M., & Reisinger, C.W. (1996). Administration and Scoring Manual for the OQ-45.2. (Availible from P.O. Box 346, Stevenson, MD 21153-0346).

Levy, M.B. & Davis, K.E. (1988). Lovestyles and attachment styles compared: Their relations to each other and to various relationship characteristics. *Journal of Social and Personal Relationships, 5,* 439-471.

Luborsky, L. Crits-Christoph, P., Alexander, L., Margolis, M. & Cohen, M. (1983). Two helping alliance methods for predicting outcomes of psychotherapy: A counting signs versus a global rating method. *Journal of Nervous and Mental Disease, 171,* 480-492.

MacKinnon, D.P. (2000). Contrasts in multiple mediator models. In J.S. Rose, L. Chassin, C.C. Presson, & S.J. Sherman (Eds). *Multivariate applications in substance use research* (pp. 141-160). Mahwah, NJ: Erlbaum.

Mallinckrodt, B., Gantt, D.L., & Coble, H.M. (1995). Attachment patterns in the psychotherapy relationship: Development of the client attachment to therapist scale.

Journal of Counseling Psychology, 42, 307-317.

Marmar, C.R., Gaston, L., Gallagher, D., & Thompson, L.W. (1989). Alliance and outcome in late-life depression. *Journal of Nervous and Mental Disease, 171,* 597-603.

Maruyama, G.M. (1998). *Basics of structural equation modeling.* Newbury Park, CA: Sage.

Marziali, E., Marmar, C., & Krupnick, J. (1981). Therapeutic alliance scales: Development and relationship to psychotherapy outcome. *American Journal of Psychiatry, 138,* 361-364.

Mikulincer, M., & Arad, D. (1999). Attachment, working models, and cognitive openness in close relationships: A test of chronic and temporary accessibility effects. *Journal of Personality and Social Psychology*, 77, 710-725.

Mikulincer, M & Horesh, N. (1999). Adult attachment styles and the perception of others: The role of protective mechanisms. *Journal of Personality and Social Psychology, 76*, 1022-1034.

Mikulincer, M., & Florian, V. (2001). Attachment style and affect regulation: Implications for coping with stress and mental health. In G. Fletcher & M. Clark (Eds.), *Blackwell handbook of social psychology: Interpersonal processes* (pp. 537-557). Oxford: Blackwell.

Miller, R.S. & Lefourt, H.M. (1982). The assessment of intimacy. *Journal of Personality Assessment, 46,* 514-518.

Miller, W.R., Taylor, C.A., & West, J.C. (1980). Focused versus braod-spectrum behavior therapy for problem drinkers. *Journal of Consulting & Clinical Psychology, 48,*

590-607.

Miller, R.B. & Wright, D.W. (1995) Detecting and correcting attrition bias in longitudinal family research. *Journal of Marriage and the Family, 57,* 921-929.

Patterson, G.R. (1976). Some procedures for assessing changes in marital interaction patterns. *Oregon Research Institute Research Bullentin, 16.*

Pianta, R.C., Egeland, B., & Adam, E.K. (1996). Adult attachment classification and self-reported psychiatric symptomatology as assessed by the Minnesota Multiphasic Personlity Inventory-2. *Journal of Consulting and Clinical Psychology, 64,* 273-281

Pistole, M.C. (1989). Attachment in adult romantic relationships: Style of conflict resolutions and relationship satisfaction. *Journal of Social and Personal Relationhips,6,* 505-510.

Platts, H., Tyson, M., & Mason, O. (2002). Adult attachment style and core beliefs: Are they linked?. *Clinical Psychology and Psychotherapy, 9*, 332-348.

Pinsof, W.M. & Catherall, D.R. (1986). The integrative psychotherapy alliance: Family, couple and individual therapy scales. *Journal of Marital and Family Therapy, 12,* 137-151.

Rahim, M.A. (1983). A measure of styles of handling interpersonal conflict. *Academy of Management Journal, 26,* 368-376.

Scott, R.L. & Cordova, J.V. (2002). The influence of adult attachment styles on the association between marital adjustment and depressive symptoms. *Journal of Family Psychology, 16,* 199-208.

Satterfield W.A. & Lyddon, W.J. (1995). Client attachment and perception of the

working alliance with counselor trainees. *Journal of Counseling Psychology, 42*, 187-189.

Senchak, M. & Leonard, K.E. (1992). Attachment styles and marital adjustment among newlywed couples. *Journal of Social and Personal Relationships, 9*, 51-64.

Shaver, P. R., & Mikulincer, M. (2003). The psychodynamics of social judgments: An attachment theory perspective. In J. Forgas, K. Williams, & W. von Hippel (Eds.), Social Judgments: Implicit and explicit processes (pp. 85-114). New York: Cambridge University Press.

Simpson, J.A. (1990). Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology, 59,* 971-980.

Snell, W.E., Jr., Miller, R.S., & Belk, S.S. (1988). Development of the emotional self-disclosure scale. *Sex Roles, 18,* 59-73.

Spanier, G.B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 38,* 15-28.

SPSS Inc. (1990). *SPSS reference guide.* Chicago: SPSS Inc.

Symonds, D. & Horvath, A.O. (2004). Optimizing the alliance in couples therapy. *Family Process, 43,* 443-455.

Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the Working Alliance Inventory. *Psychological Assessment*, 1, 207-210.

West, M., Sheldon, A., & Reiffer, L. (1987). An approach to the delineation of adult attachment**:** Scale development and reliability. *Journal of Nervous and Mental Disease, 175,* 738-741.

Whisman, M. A., & Allan, L. E. (1996). Attachment and social cognition theories of romantic relationships: Convergent or complementary perspectives? *Journal of Social and Personal Relationships*, 13, 263-278.

Zilberg, N. Weiss, D.S., & Horowitz, M.J. (1982). Impact of Events Scale: A cross-validation study and some empirical evidence regarding a conceptual model of stress response syndromes. *Journal of Consulting and Clinical Psychology, 50,* 407-414.

Press).

Butler, J. & Williams, C. (1992). *Essentials of MMPI-A interpretation.* (Minneapolis: University of Minnesota Press).

Carnelley, K. B., Janoff- Bulman, R. (1992). Optimism about love relationships: general vs specific lessons from one's personal experiences. *Journal of Social and Personal Relationships*, 9, 5-20.

Collins, N.L. & Read, S.J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*, 644-663.

Collins, N.L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology, 71*, 810-832.

Cutrona, C. E., & Russell, D. W. (1987). The provisions of social relationships and adaptation to stress. In W. H. Jones & D. Periman (Eds.), *Advances in personal relationships* (Vol. 1, pp. 37-67). Greenwich, CT: JAI Press.

Department of Health. (2001). *Treatment choice in psychological therapies and counseling.* DOH Publication No. 23044. London: HMSO.

Derogatis, L.R. (1977). *The SCL-90R Manual 1: Scoring, administration, and procedures for the SCL-90.* Baltimore: John Hopkins University School of Medicine, Clinical Psychometrics Unit, 1977.

Derogatis, L.R. (1992). BSI: *Administration, scoring, and procedures manual-II.* (Baltimore: Clinical Psychometric Research.)

APPENDIX A

Experiences in Close Relationships
Adult with a Partner

Instructions: The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Responding to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

Disagree Strongly Neutral/Mixed/ Agree Strongly

1 2 3 4 5 6 7

__1. I prefer not to show a partner how I feel deep down.
__2. I worry about being abandoned.
__3. I am very comfortable being close to romantic partners.
__4. I worry a lot about my relationship.
__5. Just when my partner starts to get close to me I find myself pulling away.
__6. I worry that romantic partners won't care about me as much as I care about them.
__7. I get uncomfortable when a romantic partner wants to be very close.
__8. I worry a fair amount about losing my partner.
__9. I don't feel comfortable opening up to romantic partners.
__10. I often wish that my partner's felling for me were as strong as my feelings for him/her.
__11. I want to get close to my partner, but I keep pulling back.
__12. I often want to merge completely with romantic partners, and this sometimes scares them away.
__13. I am nervous when partners get to close to me.
__14. I worry about being alone.
__15. I feel comfortable sharing my private thoughts and feelings with my partner.
__16. My desire to be very close sometimes scares people away.
__17. I try to avoid getting too close to my partner.
__18. I need a lot of reassurance that I am loved by my partner.
__19. I find it relatively easy to get close to my partner.
__20. Sometimes I feel that I force my partner to show more feeling, more committment.
__21. I find it difficult to allow myself to depend on romantic partners.

__22. I do not often worry about being abandoned.
__23. I prefer not to be too close to romantic partners.
__24. If I can get my partner to show an interest in me, I get upset or angry.
__25. I tell my partner just about everything.
__26. I find that my partner(s) don't' want to get as close as I would like.
__27. I usually discuss my problems and concerns with my partner.
__28. When I am not involved in a relationship, I feel somewhat anxious and insecure.
__29. I feel comfortable depending on romantic partners.
__30. I get frustrated when my partner is not around as much as I would like.
__31. I don't mind asking romantic partners for comfort, advice, or help.
__32. I get frustrated if romantic partners are not available when I need them.
__33. It helps to turn to my romantic partner in times of need.
__34. When romantic partners disapprove of me, I feel really bad about myself.
__35. I turn to my partner for many things.
__36. I resent it when my partner spends time away from me.

APPENDIX B

Revised Dyadic Adjustment Scale

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always agree	Almost Always Agree	Occasionally Agree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Religious matters	____	____	____	____	____	____
2. Demonstrations of affection	____	____	____	____	____	____
3. Making major decisions	____	____	____	____	____	____
4. Sex relations	____	____	____	____	____	____
5. Conventionality (correct or proper behavior	____	____	____	____	____	____
6. Career decisions	____	____	____	____	____	____

	All the time	Most of the time	More often than not	Occa-sionally	Rarely	Never
7. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	____	____	____	____	____	____
8. How often do you are your partner quarrel?	____	____	____	____	____	____
9. Do you ever regret that you married (or live together)?	____	____	____	____	____	____
10. How often do you and your mate “get of each other’s nerves”?	____	____	____	____	____	____

	Every Day	Almost Every Day	Occasionally	Rarely	Never
11. Do you and your mate engage	____	____	____	____	____

in outside interests together?

How often would you say the following events occur between you and your mate?

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
12. Have a stimulating exchange of ideas	____	____	____	____	____	____
13. Work together on a project	____	____	____	____	____	____
14. Calmly discuss something	____	____	____	____	____	____

APPENDIX C

Couple Therapy Alliance Scale

Instructions: The following statements refer to your feelings and thoughts about your therapist and your therapy right NOW. Please work quickly. We are interested in your FIRST impressions. Your ratings are CONFIDENTIAL. They will not be shown to your therapist or other family members and will only be used for research purposes. Although some of the statements appear to be similar or identical, each statement is unique. PLEASE BE SURE TO RATE EACH STATEMENT.

Each statement is followed by a seven-point scale. Please rate the extent to which you agree or disagree with each statement AT THIS TIME. If you completely agree with the statement, circle number 7. If you completely disagree with the statement, circle number 1. Use the numbers in-between to describe variations between the extreme

Completely Agree = 7 Strongly Agree = 6 Agree = 5 Neutral = 4 Disagree = 3
Strongly Disagree = 2 Completely Disagree = 1

1. The therapist cares about me as a person
2. The therapist and I are not in agreement about the goals for this therapy.
3. My partner and I help each other in this therapy.
4. My partner and I do not feel the same ways about what we want to get out of this therapy.
5. I trust the therapist.
6. The therapist lacks the skills and ability to help my partner and myself with our relationship.
7. My partner feels accepted by the therapist.
8. The therapist does not understand the relationship between my partner and myself.
9. The therapist understands my goals in therapy.
10. The therapist and my partner are not in agreement about the about the goals for this therapy.
11. My partner cares about the therapist as a person.
12. My partner and I do not feel safe with each other in this therapy.
13. My partner and I understand each other's goals for this therapy.
14. The therapist does not understand the goals that my partner and I have for ourselves in this therapy.
15. My partner and the therapists are in agreement about the way the therapy is being conducted.
16. The therapist does not understand me.
17. The therapist is helping my partner and me with our relationship.

18. I am not satisfied with the therapy.
19. My partner and I understand what each of us is doing in this therapy.
20. My partner and I do not accept each other in this therapy.
21. The therapist understands my partner's goals for this therapy.
22. I do not feel accepted by the therapist.
23. The therapist and I are in agreement about the way the therapy is being conducted.
24. The therapist is not helping me.
25. The therapist is in agreement with the goals that my partner and I have for ourselves as a couple in this therapy.
26. The therapist does not care about my partner as a person.
27. My partner and I are in agreement with each other about the goals of this therapy.
28. My partner and I are not in agreement about the things that each of us needs to do in this therapy.
29. The therapist has the skills and ability to help me.
30. The therapist is not helping my partner
31. My partner is satisfied with the therapy.
32. I do not care about the therapist as a person.
33. The therapist has the skills and ability to help my partner.
34. My partner and I are not pleased with the things that each of us does in this therapy.
35. My partner and I trust each other in this therapy.
36. My partner and I distrust the therapist.
37. The therapist cares about the relationship between my partner and myself.
38. The therapist does not understand my partner.
39. My partner and I care about each other in this therapy.
40. The therapist does not appreciate how important my relationship between my partner and myself is to me.