

CLIENT SYMPTOM DISTRESS, STAGE OF CHANGE, AND THE THERAPEUTIC
ALLIANCE IN COUPLE THERAPY

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.

Robert D. Porter

Certificate of Approval:

Alexander T. Vazsonyi
Professor
Human Development and Family
Studies

Scott A. Ketring, Chair
Associate Professor
Human Development and Family
Studies

Thomas A. Smith
Associate Professor
Human Development and Family
Studies

Joe F. Pittman
Interim Dean
Graduate School

CLIENT SYMPTOM DISTRESS, STAGE OF CHANGE, AND THE THERAPEUTIC
ALLIANCE IN COUPLE THERAPY

Robert D. Porter

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 4, 2007

CLIENT SYMPTOM DISTRESS, STAGE OF CHANGE, AND THE THERAPEUTIC
ALLIANCE IN COUPLE THERAPY

Robert D. Porter

Permission is granted to Auburn University to make copies of this thesis at its discretion, upon request of individuals or institutions and at their expense. The author reserves all publication rights.

Signature of Author

Date of Graduation

VITA

Robert D. Porter, son of Richard and Sharon Porter, was born on March 21, 1979, in Salt Lake City, Utah. He graduated with a Bachelor of Science degree in Marriage, Family, and Human Development from Brigham Young University in April, 2004. Upon completion of his Bachelor degree, he worked as Program Coordinator for Youth Reclamation, Inc., located in Provo, Utah. Following his tenure with Youth Reclamation, Inc., he entered Graduate School at Auburn University to complete a Master of Science in Human Development and Family Studies, with an emphasis in Marriage and Family Therapy. Robert was married to his wife, Rebecca N. Whitney, daughter of Steven and Maxine Whitney, on February 5, 2005. Robert and Rebecca's daughter, Whitney Rachel, was born on December 30, 2006.

CLIENT SYMPTOM DISTRESS, STAGE OF CHANGE, AND THE THERAPEUTIC
ALLIANCE IN COUPLE THERAPY

Robert D. Porter

Master of Science, August 4, 2007
(B.S., Brigham Young University, 2004)

79 Typed Pages

Directed by Scott A. Ketring

The purpose of this thesis was to examine how the relationship between client symptom distress and the therapeutic alliance was mediated by client stage of change in couple therapy. Sample for this study was composed of couples attending therapy at a marriage and family therapy training clinic at a southeastern university. No mediating relationship was found for males or females. A significant relationship was found for males between the Precontemplation stage and the alliance. Furthermore, males were found to enter couple therapy at higher levels of Precontemplation than females, while females entered couple therapy at higher levels of Motivation. Additionally, a significant negative relationship found between symptom distress and the alliance for males. No predictors were significantly related to the alliance for females.

ACKNOWLEDGEMENTS

I would like to thank my Heavenly Father, my Savior Jesus Christ, and my wife Becky for being my foundation throughout this process. I would also like to thank my daughter, Whitney, whose inability to stop smiling made this experience bearable. Much appreciation is expressed to my parents, whose counsel and wisdom sustained me. I would like acknowledge and thank Dr. Scott Ketring, my committee chair, for his guidance and direction in this research. I appreciate the way in which he pushed me to look at things in a different way and search for answers, as well as took time to counsel and prepare me for my future. Special thanks are extended to Dr. Margaret Keiley, without whose patience and guidance, my analysis would be a pile of indiscernible code and sorrow. I would also like to thank Dr. Alexander Vazsonyi for clarification and direction in interpreting results, and for being a voice of reason. Finally, I would like to thank Dr. Thomas Smith for keeping me focused on what matters and helping me keep a cool head throughout this process.

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

Computer software used: Microsoft Office Word, SAS, Mplus

TABLE OF CONTENTS

LIST OF TABLES	ix
LIST OF FIGURES	x
INTRODUCTION	1
REVIEW OF LITERATURE	6
METHODS	25
RESULTS	33
DISCUSSION.....	45
REFERENCES	55
APPENDIX A.....	63
APPENDIX B	65
APPENDIX C	67
APPENDIX D.....	69

LIST OF TABLES

Table 1: Demographics for Males and Female	26
Table 2: Univariates and Chi-square for Demographics.....	28
Table 3: Univariates and Chi-square for Predictor Variables.....	35
Table 4: Fit Statistics for Mplus Models.....	36
Table 5: Delta Chi-square Tests for Separated Models	43
Table 6: Parameter Estimates for Separated Models	43

LIST OF FIGURES

Figure 1: Hypothesis Path Diagram.....	24
Figure 2: Path Diagram for Model 1.....	37
Figure 3: Parameter Estimates for Models 1-3 (Males).....	40
Figure 4: Parameter Estimates for Models 1-3 (Females)	41

INTRODUCTION

The therapeutic alliance is considered to be one of the central concerns in individual and couple therapy (Garfield, 2004). Though it may be called by a variety of names, including therapeutic alliance, working alliance, and helping alliance, the construct of the alliance is typically defined as the relationship between the therapist and the client based on agreement of three main concepts: goals, bonds, and tasks (Bordin, 1979). Creating a successful therapeutic alliance is dependent on agreement in these areas, as well as mutual liking and trust between the client and therapist (Raue, Castonguay, & Goldfried, 1993).

As the alliance is regarded by some to be a central concern for therapists, research has long looked at the relationship between the alliance and outcomes in both individual and couple therapy. Findings consistently point to a moderate to strong positive relationship between the therapeutic alliance and outcomes (Castonguay, Goldfried, Wisner, Raue, & Hayes, 1996; Horvath, 2001; Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). With two different meta-analyses conducted in this field (Horvath & Symonds, 1991; Martin et al., 2000) further solidifying the impact of the alliance on outcomes, there remains little doubt that the alliance is an essential component of successful therapy. It seems the alliance is so important that it has been suggested to be *the* key to successful therapy (Bordin, 1979).

Recognizing the need to establish a strong therapeutic alliance, researchers have begun to look specifically at what might contribute to alliance development. Specifically, researchers have begun to look at what both the client and therapist contribute to the alliance (Thomas, Werner-Wilson, & Murphy, 2005; Wintersteen, Mensinger, & Diamond, 2005; Taft, Murphy, Musser, & Remington, 2004; Constantino, Arnow, Blasey, & Agras, 2005; Bedi, David, & Williams, 2005). Client symptom distress is one variable that has been proposed to be related to the formation of the therapeutic alliance. Research with individual therapy has generally reported a significant and negative relationship between client symptom distress and the therapeutic alliance (Eaton, Abeles, & Gutfreund, 1988; Connors et al., 2000; Constantino et al., 2005; Raue et al., 1993). Meaning, when a client has high levels of symptom distress, they have low levels of therapeutic alliance, and vice-versa. Interestingly, however, Principe, Marci, Glick, and Ablon (2006) did not find a relationship between symptom distress and the alliance in individual therapy.

Of the limited research that has been conducted in couple therapy, the majority of findings are similar to that of Principe et al. (2006) with individual therapy. Three separate studies have failed to find a significant relationship between client symptom distress and the therapeutic alliance in couple therapy (Johnson & Taliman, 1997; Knobloch-Fedders et al., 2004; Mamodhousen, Wright, Tremblay, & Poitras-Wright, 2005). One study, however, found a significant negative relationship between client symptom distress and the therapeutic alliance (Stephens, 2006). In her study analyzing symptom distress and couple relationship scores with the therapeutic alliance, Stephens (2006) found symptom distress to be the strongest predictor of therapy alliance

formation, accounting for 17% of the variance; more than couple relationship scores, implying client symptom distress in couple therapy may be more important than previously thought. Interestingly, however, this relationship was only found for male participants. In her findings, Stephens speculated that there may be another variable that may influence the relationship for females. With limited research on this topic in couple therapy, however, more research is needed to determine what that variable might be.

The research by Principe et al. (2006) provides a possible answer as to what that variable might be and a direction as to where future research for client symptom distress and the alliance should begin to focus. This study also examined client symptom distress and the alliance in individual therapy, finding no significant relationship between the two, contrary to other research in individual therapy. However, they reported that another variable, client stage of change, was significantly related to the alliance, and therefore important in therapy. Other researchers have reported similar findings and proposed that client stage of change is an important factor in the formation of the alliance (Connors et al., 2000; Rochlen, Rude, & Baron, 2005; Taft et al., 2004). Research in client stage of change has consistently found a positive significant relationship with the therapeutic alliance in individual therapy. Specifically, when a client enters therapy with an increased readiness for change, as determined by their stage of change score, that client reports higher ratings of the therapeutic alliance (Connors et al., 2000; Principe et al., 2006; Rochlen et al., 2005; Taft et al., 2004). In fact, in a study among 707 outpatients and 480 aftercare patients in an alcohol treatment program, Connors et al. (2000) found client stage of change was one of only two variables positively related to the alliance for

outpatients. Among aftercare participants, client stage of change was the *only* variable to be positively related to the alliance.

Like client symptom distress, research in the area of client stage of change is still relatively limited, with no existing research in couple therapy. There seems to be little doubt, however, that it is an important construct in the formation of the alliance in individual therapy. In 2004, Taft et al. further solidified the relationship of the alliance and client stage of change. Their research examined the relationship between the therapeutic alliance and borderline and psychotic personality features with the client stage of change as a mediating variable. They found that clients with high levels of borderline and psychotic personality features reported lower alliance scores. When they included client stage of change as a mediator in the model, however, they found this relationship was reduced to non-significant levels; client stage of change remained a significant predictor. These findings, coupled with findings reported by Stephens (2006) regarding male client symptom distress in couple therapy, as well as those reported by Principe et al. (2006) regarding client stage of change provide the foundation for this study. It may be that client stage of change is the variable explaining the difference between male and females on symptom distress. Perhaps symptom distress is not related to the alliance for females because they are more motivated to change when they enter therapy.

The alliance has consistently been found to be an important predictor of therapy outcomes. Research investigating contributing factors, however, remains unclear. Specifically, research examining the relationship between the alliance and client symptom distress has reported mixed findings, in both individual and couple therapy.

The relationship between client stage of change and the alliance, while fairly firmly established in individual therapy research, remains to be examined in couple therapy. With similar studies in existence (Principe et al. 2006; Stephens, 2006; Taft et al., 2004), this study will attempt to build on previous research, as well as fill existing gaps by providing some possible explanations for the different findings reported for male and female participants in Stephens' (2006) research. Specifically, this study will examine the relationship between the therapeutic alliance and client symptom distress in couple therapy, with client stage of change as a hypothesized mediator. It will also examine whether stage of change level differs at intake for males and females, and whether this may be what accounts for the difference in symptom distress. Therefore, Based on the mediating relationship demonstrated by Taft et al. (2004), and findings reported by Stephens (2006), it is hypothesized that:

Hypothesis 1: Client symptom distress will be significantly and negatively related to the therapeutic alliance for males and females in couple therapy.

Hypothesis 2: Client stage of change will be significantly and positively related to the therapeutic alliance for males and females in couple therapy.

Hypothesis 3: The relationship between client symptom distress and the therapeutic alliance will be mediated by client stage of change for males and females in couple therapy.

Hypothesis 4: Females will enter couple therapy at a higher stage of change than males.

REVIEW OF LITERATURE

The Therapeutic Alliance

Although it may be referred to by a variety of titles, including therapeutic alliance, working alliance, working relationship, and helping alliance, the therapeutic alliance has long been recognized as an important part of the therapeutic process (Horvath, 2001; Horvath & Symonds, 1991).

Throughout alliance research, these different names have been interchangeable. For the purposes of this paper, the alliance will be referred to as the therapeutic alliance. Regardless of how one labels it, however, the therapeutic alliance is typically defined as the relationship that exists between the therapist and the client, as rated by the client, the therapist, or even an outside observer. Horvath and Bedi (as cited in Horvath, 2001) described the therapeutic alliance as:

...The quality and strength of the collaborative relationship between client and therapist in therapy. This concept is inclusive of: The positive affective bonds between client and therapist, such as mutual trust, liking, respect, and caring...consensus about, and active commitment to, the goals of therapy and to the means by which these goals can be reached...The alliance is a conscious and purposeful aspect of the relation between therapist and client (p. 365).

This definition provided by Horvath and Bedi is based largely on the three main components of the therapeutic alliance, as first set forth by Bordin (1979), and encompasses the core of the alliance as it is viewed in the majority of alliance research.

Specifically, Bordin (1979) defined the three main components of the therapeutic alliance as the composition of bond, tasks, and goals. The bond is defined as the human relationship between the client and the therapist. More specifically, bonds are defined as, "...the mutual liking, attachment, and trust between the client and therapist" (Raue et al., 1993, p. 198). Tasks are defined as the collaboration that occurs between the therapist and the client in accomplishing the goals of therapy. Tasks include the in-session activities and homework assignments that may take place during session. Goals are defined as the agreement on the problems for which the client comes to therapy. Goals are the specific area targeted by the client and the therapist as the specific areas of change (Bordin, 1979; Raue et al., 1993).

Therapeutic Alliance and Therapeutic Outcomes

With many differing techniques to therapy, Bordin proposed that there must be some common element contributing to therapeutic outcomes (Bordin, 1979). In his 1979 paper, he described the therapeutic alliance as, "one of the keys, if not *the* key, to the change process" (p. 252). Recent research has looked at the therapeutic alliance as a possible common factor in therapy outcomes across all therapeutic techniques (Castonguay et al., 1996; Horvath, 2001; Horvath & Symonds, 1991; Lambert & Barley, 2001; Martin et al., 2000). This research has consistently shown overwhelming support for the importance of the therapeutic alliance in outcomes (Horvath & Luborsky, 1993; Johnson & Taliman, 1997; Castonguay et al, 1996).

With a large amount of research claiming a relationship between therapeutic alliance and outcomes, Horvath and Symonds (1991) completed a meta-analysis of 24 articles researching this relationship. These articles were sampled from 1980-1991 and included 21 published and 3 unpublished articles. Articles were found by conducting a search of 4 databases: PsycInfo, MedLine, Dissertation Abstracts, and Educational Resources Information Center (ERIC). A manual search was also completed of all journal articles related to the alliance from the 12 months prior to commencement of the study. Inclusion criteria for the 24 articles included a) a relationship identified as a helping, working, or therapeutic alliance, b) a quantifiable relationship between the alliance and some type of outcome, c) clinical research, d) five or more subjects, and e) only research on individual treatment.

Horvath and Symonds (1991) then created effect sizes by first converting all r values into Z equivalents to control for the bias of the r distribution, and then reconverting the Z equivalents back into r values. In their meta-analysis, the therapeutic alliance was found to have a “robust” (p.146) and reliable association with therapy outcomes. Further, it was found that the type of therapy, or particular approach, did not influence ratings of the therapeutic alliance.

In a similar study, Martin et al. (2000) also examined the relationship between the therapeutic alliance and therapy outcomes. Like Horvath and Symonds (1991), they completed a meta-analytic review of 58 published studies and 21 unpublished studies. Research for their analysis was gathered based on similar inclusion criteria to Horvath and Symonds, but also stipulated that the article must be in English and must be available between 1977 and 1997. Martin et al. used similar databases, but also include PsycLIT.

After creating effect sizes for the articles reviewed, Martin et al. also found that on average, when the quality of the therapeutic alliance was high, therapy outcomes were high, and vice-versa. They concluded the relationship of therapeutic alliance and therapy outcomes “appears to be consistent, regardless of the many variables that have been posited to influence this relationship” (p. 446).

These findings, along with previously conducted research, leave little doubt of a positive relationship between the therapeutic alliance and therapy outcomes. As noted, however, the majority of the research that exists has been conducted in individual therapy. Pinsof and Catherall (1986) were among the first to extend the concept into the field of couple and family therapy. Since that time, researchers have looked more in depth at the role of the therapeutic alliance in couple therapy (Garfield, 2004; Knobloch-Fedders et al., 2004). While there has not yet been any meta-analysis conducted on this relationship in couple and family therapy, similar to research in individual therapy, the therapeutic alliance has continuously been found to be an important component in outcomes in couple and family therapy (Heatherington & Friedlander, 1990; Symonds & Horvath, 2004; Johnson & Taliman, 1997).

Symptom Distress and the Therapeutic Alliance

With a well established relationship between the therapeutic alliance and therapy outcomes and with the apparent importance of the alliance, research has recently begun to look at what factors might influence the therapeutic alliance. As with outcomes and the alliance, much of this research exists in the individual therapy realm. Recent research has focused on variables such as the client’s and therapist’s sex (Thomas et al., 2005), racial differences between the client and the therapist (Wintersteen et al., 2005), motivational

readiness to change, personality characteristics, interpersonal characteristics, (Constantino et al., 2005; Taft et al., 2004), critical incidents in therapy, and therapist technique (Bedi et al., 2005).

One variable that has received little attention, even in individual therapy, is that of client symptom distress. Of the few studies examining symptom distress and the therapeutic alliance in individual therapy, findings suggest that on average, at high levels of symptom distress, there are low levels of therapeutic alliance (Connors et al., 2000; Constantino et al., 2005; Eaton et al., 1988; Raue et al., 1993). One of the earliest studies to examine the relationship between client symptom distress and therapeutic alliance was published in 1988 by Eaton, Abeles, and Gutfreund. Data for this study were collected for the Michigan State University (MSU) Psychotherapy Research Project during a four-year period from 1978-1982. Researchers selected 40 cases to be analyzed based on inclusion criteria of completing at least 10 sessions, completing pre- and post-therapy written measures, and completing audiotape of selected sessions. These 40 cases were then grouped into three groups: high (over 40 sessions) containing 12 cases, moderate (20-40 sessions), containing 15 cases, and low (20 sessions or less), containing 13 cases.

Client pretreatment symptom distress was measured using the Hopkins Symptom Checklist (SCL-90; Derogatis, 1977). Therapeutic alliance was measured using the Therapeutic Alliance Rating Scale (TARS; Marziali, 1984). In addition, two judges, one male and one female graduate student in clinical psychology, rated the therapeutic alliance based on randomly selected audio segments from the beginning, middle, and end of treatment. Both students were trained to rate the alliance by reading the manual for the rating system, rating practice sessions, and participating in group meetings to discuss

transcripts from audiotapes in order to achieve consensus. Following the training period, both students participated in 16 additional hours of meetings during the 20 weeks of ratings to prevent rater drift.

Findings from this study revealed that on average when clients have a high level of symptom distress, they rated low on the therapeutic alliance, and vice-versa. More specifically, when a client entered therapy with a high level of symptom distress, they had lower levels of positive contribution to the alliance, while also having a higher level of negative contribution to the alliance. In other words, Eaton et al. (1988) found that high pretreatment symptom distress was associated with lower positive and higher negative alliance.

Raue et al. (1993) found similar findings 5 years later. They conducted a study looking at the same variables of client symptom distress and therapeutic alliance within specific therapeutic approaches. Thirty-one therapists identified by double nomination as experts in either cognitive-behavioral therapy or psychodynamic-interpersonal therapy worked with one client, making the total number of client participants 31, presenting with either depression or anxiety. Clients taking psychoactive medications, possessing psychotic or borderline features, or presenting with life stress problems were excluded from participation in the study.

In this study, symptom distress was measured using the Global Symptom Severity Index of the Symptom Checklist (SCL-90; Derogatis, Lipman, Rickets, Uhlenhuth, & Covi, 1974). Therapeutic alliance was measured using the Working Alliance Inventory-Observer Form (WAI-O; Horvath & Greenberg, 1989). Data were analyzed from a single session in the middle of treatment chosen by each therapist as a session in which a

large amount of change occurred, as per the therapist's perception. In order to meet inclusion criteria, themes in these chosen sessions had to reflect the primary issue for which clients entered therapy. Therapist also had to note an impact on the client in that particular session, as well as in subsequent sessions.

Although the researchers noted that this method of data collection was a potential limitation of the study, Raue et al. (1993) reported significant findings for the relationship between the alliance and client symptom distress. In their results, they reported that on average, when client symptom distress was high, the therapeutic alliance was low, and vice-versa. Their findings were consistent with previous research conducted by Eaton et al. (1988), finding a negative relationship between client symptom distress and the alliance. Studies conducted in the early 2000's have also found a significant negative relationship between client symptom distress and the alliance (Connors et al., 2000; Taft et al., 2004).

Findings in this area, however, are not all cut and dry. Some researchers examining the same relationship between the same constructs failed to find a significant relationship. In a study of bulimic clients, Constantino et al. (2005), for example, examined client symptom distress and its relationship to the therapeutic alliance. Constantino et al. did report findings similar to those of other researchers, finding client symptom distress at baseline to be negatively related to middle treatment alliance in cognitive-behavioral therapy. Interestingly, however, they also noted no significant relationship existed between symptoms and the alliance for bulimic clients receiving interpersonal therapy. Principe et al. (2006) also examined the relationship between these

two constructs among outpatient individual clients. Like Constantino et al, they did not find a significant relationship between the alliance and symptom distress.

Overall, it seems the effect of client symptom distress on the alliance in individual therapy remains in question. While the majority of the research found a negative relationship, some studies failed to find any significance. But with findings of significance in individual therapy, researchers have begun to examine this relationship in couple therapy. Like individual therapy, however, couple therapy shows similarly mixed findings (Johnson & Taliman, 1997; Knobloch-Fedders et al., 2004; Mamodhousen et al., 2005; Stephens, 2006).

Little research exists in couple therapy examining the relationship between client symptom distress and the therapeutic alliance. Knobloch-Fedders et al. (2004) were among the first to research these constructs in couple therapy. In 2004, they conducted a study examining the relationship between the alliance and marital distress, client symptom distress, and family of origin functioning. They included 80 people treated with conjoint therapy at a Midwestern outpatient clinic specializing in couple and family therapy. The 80 participants were composed of 35 couples and 10 individuals, for which partner data were missing. Participants presented in therapy with a number of problems such as communication, intimacy, conflict, and parenting. Number of treatment sessions were not limited, but averaged 18.26 sessions.

Participants in this study completed the COMPASS Treatment Assessment System (Howard, Brill, Lueger, O'Mahoney, & Grissom, 1995) before the first session. The COMPASS is a 68 item assessment containing three subscales: Current Well-Being, Current Symptoms, and Current Life Functioning. The Current Well-Being subscale

assesses distress, energy and health, emotional and psychological adjustment, and current life satisfaction. The Current Symptoms subscale is designed to assess for frequency of symptoms common with depression, anxiety, obsessive-compulsive disorder, adjustment disorder, bipolar disorder, phobia, and substance use disorders. The Current Life Functioning subscale assesses 6 areas of life functioning: self-management, work/school/homemaker, social/leisure, intimacy, family, and health.

Researcher also assessed for marital distress using the Marital Satisfaction Inventory—Revised (MSI-R; Snyder, 1997), while family of origin functioning was assessed using the Family Assessment Device—family of origin (FAD; Epstein, Baldwin, & Bishop, 1983; Miller, Epstein, Bishop, & Keitner, 1985). Both of these measures were completed, along with the COMPASS, before the initial session. Immediately following session 1 and session 8, participants completed the Couple Therapeutic Alliance Scale—Revised (CTAS-R; Pinsof, 1994) in order to assess for therapeutic alliance.

Findings suggested that while marital adjustment was related to the therapeutic alliance, client symptom distress was not. Specifically, Knobloch-Fedders et al. (2004) found no significant relationship between the alliance and symptom distress. They stated, “Individual symptomatology is not useful as a predictor of the formation of the alliance in conjoint treatment,” (p. 438). The authors further noted that these findings of no significant relationship were consistent with the only other study completed on client symptom distress in couple therapy (Mamodhousen et al., 2005). According to these researchers, any significant relationship that existed in individual therapy research did not exist in couple therapy. Perhaps individual symptom distress was not an important factor in the therapeutic alliance for couple therapy.

One study, however, suggests findings for symptom distress in couple therapy may not yet be set in stone. In 2006, Stephens conducted a study similar to those conducted by Knobloch-Fedders et al. (2004) and Mamodhoussen et al. (2005). Collecting data from 106 couples, Stephens examined the relationship between male and female symptom distress, as well as differences in symptom distress and the formation of the therapeutic alliance. Couples received treatment from the Auburn University Marriage and Family Therapy Center between March 1, 2002, and April 30, 2006. Inclusion criteria consisted of attending at least four therapy sessions and completing fourth session paperwork, as well as intake paperwork before the initial session. Couples who did not complete both sets of paperwork were not included in this study. No other exclusion criteria were included.

To assess for client symptom distress in this study, Stephens used the Outcome Questionnaire (OQ-45.2; Lambert et al., 1996). Marital adjustment was assessed by using the Revised Dyadic Adjustment Scale (RDAS; Spanier, 1976). Both of these instruments were included in the initial assessment package completed by the couple before the first therapy session. Following the fourth session, the couple completed the same instruments they completed before the first session, as well as the Couple Therapy Alliance Scale—Revised (CTAS-R; Pinsof, 1994) in order to assess for therapeutic alliance.

Findings for this study were not consistent with previous research. Stephens (2006) found a negative relationship between male symptom distress and therapeutic alliance. She reported that on average, when male symptom distress was high, therapeutic alliance was low, and vice-versa. Further, Stephens found male marital

distress did not impact the alliance when the male had high levels of symptom distress. Based on her findings, Stephens declared, “Male’s level of symptoms at intake may be a crucial vehicle to the formation of male’s therapy alliance,” (p. 40) implying symptom distress may be an important factor in the alliance in couple therapy. Interestingly, however, Stephens did not find this same relationship for females. In fact, Stephens reported no significant findings for females, speculating that, “perhaps there are other variables in which females are influential,” (p.41). Stephens’ results create some question in the literature. What accounts for the different findings for males and females? What might be the other variables in which females are influential? Her findings reveal that the relationship between symptom distress and the alliance is not yet fully understood. One such variable that was not included in Stephens’ study was client stage of change, which this study will look at in detail. It may be possible that female participants in Stephens’ study entered therapy at a higher stage of change than males, explaining the difference in findings.

Client symptom distress has been posited as an important factor in the formation of the alliance. However, findings from research in this area remain mixed at best, for both individual and couple therapy. It seems safe to say, it would be a mistake to simply accept current findings as set and leave this construct behind. Alliance research could benefit from a better understanding of client symptom distress, especially in couple therapy where research remains limited.

Stage of Change and Therapeutic Alliance

In their 2006 study, Principe et al. failed to find a significant relationship between client symptom distress and the therapeutic alliance, but examined another variable that

may further illuminate the unclear relationship between client symptom distress and the alliance. Their study examined how the therapeutic alliance relates to symptom distress, as well as client stage of change. Data were collected from 91 participants receiving therapy at a northern New England community outpatient mental health center and university counseling center between September 2003 and March 2004. Participants were self-referred, referred from employee assistance programs, or referred from other mental health professionals. No potential participants were excluded on the basis of exclusion criteria of court-ordered treatment, active psychoses, or impaired memory.

These researchers assessed symptom distress by using the Brief Symptom Inventory (BSI-18; Derogatis, 2001). Client stage of change was measured using the Stages of Change Scale (URICA; McConaughy, Prochaska, & Velicer, 1983). Following the first session, clients completed the Working Alliance Inventory (WAI—Short Form Client; Horvath & Greenberg, 1989) to assess for therapeutic alliance. Participants completed initial paperwork (BSI—18, URICA) before the first session, as well as immediately after (WAI—Short Form Client). Participants received \$15 for participating and though therapists were aware of the study, participating clients were not identified.

As noted previously, findings for this study were contrary to those reported by previous research in client symptom distress in individual therapy. Symptom distress was not significantly related to the therapeutic alliance, contrary to the hypothesized relationship. Instead, researchers found that client stage of change was significantly and positively related to early therapeutic alliance. On average, when clients were in the contemplation stage of the stages of change, early therapeutic alliance was high. In other

words, of the two variables, only the client stage of change was a significant predictor of the alliance.

Client stage of change is defined as the client's motivation, or how ready they are to change current behaviors, feelings, attitudes, etc. (Prochaska & Norcross, 2001) and is typically broken down into four possible categories: precontemplation, contemplation, action, and maintenance. In the precontemplation stage, clients are considered to have no intention to change in the foreseeable future. The client may not be aware, or may be only minimally aware, of anything needing to be changed. The contemplation stage is defined as a stage in which clients are aware a problem exists and are seriously thinking about changing it, but have not yet made a commitment to change it. The action stage is defined by, as could be assumed, action. In this stage the client is actually in the process of modifying his or her behavior. A client would be considered to be in this stage if he or she has successfully altered his or her behavior for a period of one day to six months. In the maintenance stage, a client is simply working to prevent relapse into previous behaviors. A client in this stage may report coming to therapy for a boost, or extra support to maintain gains (Prochaska & Norcross, 2001; Willoughby & Edens, 1996).

Like Principe et al. (2006) previous researchers have examined client stage of change and how it relates to therapeutic alliance. Connors et al. (2000) was among the first to examine the relationship of client stage of change and the formation of the therapeutic alliance. In his 2000 study, he gathered data from 707 outpatients and 480 aftercare patients in Project MATCH. Project MATCH is an alcohol treatment program in which participants were assigned to one of three treatment groups: Twelve-Step Facilitation (TSF) based on typical 12-step programs, Cognitive-Behavioral Coping

Skills Treatment (CBT) based on social learning theory, or Motivational Enhancement Therapy (MET) based on principles of motivational psychology. Outpatient participants assigned to these groups were recruited from the community, whereas aftercare participants were recruited from intensive day or inpatient treatment programs. Inclusion criteria for the outpatient group required a current Diagnostic and Statistical Manual-III-Revised (American Psychiatric Association, 1987) diagnosis of alcohol abuse or dependence, alcohol as the drug of choice, active drinking during 3 months prior to the study, minimum age of 18, and a 6th grade reading level. Inclusion for the aftercare program required the same with a diagnosis of abuse or dependence was based on the 3 months prior to entrance of an intensive treatment program.

Treatment in this study lasted 12 weeks with each session being video-taped. The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) was used to measure the therapeutic alliance and was completed after at least two sessions, but not more than three. Researchers assessed for client drinking history by using a number of measures including the alcohol section of the SCID (Spitzer & Williams, 1985), the Alcohol Use Inventory (AUI; Wanberg, Horn, & Foster, 1977), and the Drinker Inventory of Consequences (DrInC; Miller, Tonigan, & Longibaugh, 1995). Motivational readiness to change, or the client's stage of change, was measured using the University of Rhode Island Change Assessment scale (URICA; McConaughy et al., 1983). Finally, researchers also included the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) to assess for symptom distress.

In their findings, Connors et al. (2000) reported that a number of factors were related to the therapeutic alliance. Of the variables they found had a positive relationship,

however, few reached significance. Of the few, client age and stage of change were found to be positively related to the alliance, while client education was negatively related for the outpatient treatment group. Among aftercare participants, client stage of change remained significantly positively related to the alliance, while client symptom distress was significantly negatively related.

Principe et al. (2006) and Connors et al. (2000) are not alone in their findings. Other studies have also found a significant relationship between client stage of change and therapeutic alliance. In a study on the relationship between stages of change and therapeutic alliance among college students, Rochlen et al. (2005) found that short term clients entering therapy in the precontemplation stage rated their alliance with the therapist lower than clients in a higher stage. Constantino et al. (2005) also found that the client stage of change was related to the alliance among bulimic clients. To date, however, these researchers are not aware of any existing research examining the relationship between client stage of change and the therapeutic alliance in couple therapy. All previous research appears to have been conducted among individual therapy clients, creating question as to whether significance would remain in this relationship when examined in couple therapy.

Also yet to be examined is the possible relationship between the therapeutic alliance and client symptom distress and client stage of change. Principe et al. (2006) and Connors et al. (2000) did include both variables in their study, but failed to examine any possible mediation that may exist in the relationship. One study, however, examined the relationship between the alliance and client stage of change, as well as a variable similar to symptom distress. Taft et al. (2004) conducted a study examining the alliance,

client stage of change, and client symptom distress in terms of psychopathic characteristics and borderline personality features. They collected data from 107 men seeking therapy for perpetration of domestic abuse. Clients were seen at a community-based health agency. All participants had a documented problem with relationship abuse, as documented by their partner or an arrest report. Thirteen of these men were self-referred clients, the other 94 were either court ordered, or had a pending legal case.

Participants were assigned to a CBT group program consisting of 16 weekly 2-hour sessions. At intake, each participant completed the Self-Report Psychopathy Scale-II (SRP-II; Hare, 1990) to assess for psychopathic characteristics. Participants also completed the Self-Report Instrument for Borderline Personality Organization (BPO; Oldham et al., 1985). Researchers assessed for interpersonal functioning by using the Inventory of Interpersonal Problems (IIP; Alden, Wiggins, & Pincus, 1990). Finally, client stage of change was measured using the Safe-at-Home Instrument (Begun et al., 2003), a stage of change scale specific to intimate partner violence. Following sessions 3, 5, 11, and 13, participants completed the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989).

In their results, Taft et al. (2004) confirmed findings on stage of change; higher stage of change consistently predicted more positive WAI scores. Further, they found this to be the only predictor that was significant across all session for which it was assessed, illustrating the importance of client stage of change in the alliance. They also found that psychopathic traits and borderline features were negatively related to the alliance at later sessions of therapy. Interestingly, however, when they conducted a mediation of the relationship between psychopathic traits and the therapeutic alliance,

they found that client stage of change appeared to mediate that relationship, reducing the effects of psychopathic traits to non-significant.

Findings reported by Taft et al. (2004) bring some interesting questions to light. Their findings that clients with high levels of psychotic and borderline personality features have low ratings of therapeutic alliance imply that clients dealing with higher levels distress will have difficulty forming an alliance with their therapist. While some may term personality disorder features more severe than symptom distress, these findings, coupled with those reported by Stephens (2006) regarding symptom distress in couple therapy and the lack of research examining stage of change in couple therapy, leave questions to be answered regarding the relationship between the therapeutic alliance and client symptom distress and stage of change in couple therapy. Is it possible that the findings reported by Stephens were actually influenced by client stage of change? Did the males in her study enter therapy at a lower stage of change than did the females, and thus, their therapy alliance was affected by symptom distress? Is it possible that client stage of change mediates the relationship between symptom distress and the therapeutic alliance in couple therapy?

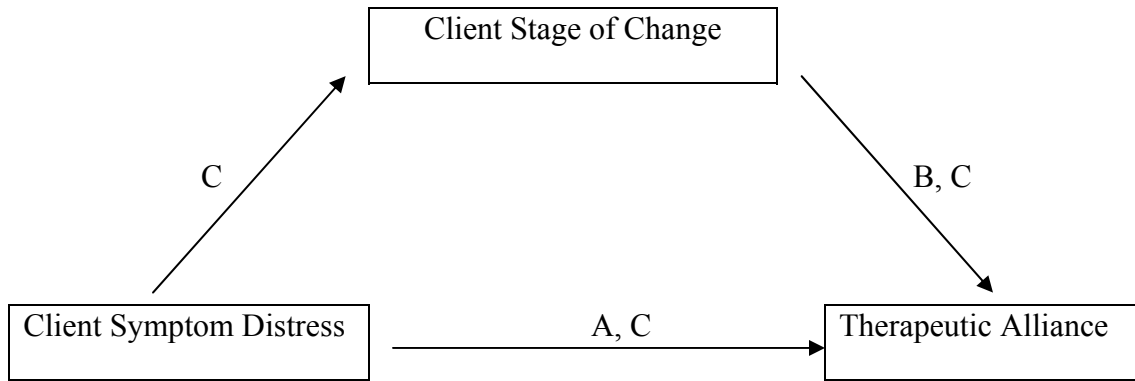
Introduction of Research Questions

The therapeutic alliance has been overwhelmingly elucidated as an important, if not key factor in positive outcomes in therapy, both individual and couple, as well as a common factor in therapy (Castonguay et al., 1996; Horvath, 2001; Horvath & Luborsky, 1993; Horvath & Symonds, 1991; Johnson & Taliman, 1997; Lambert & Barley, 2001; Martin et al., 2000). With that kind of support for the importance of the alliance, it has

become crucial to understand how to develop a stronger alliance to produce better outcomes.

To date, research on the relationship between client symptom distress and therapeutic alliance has yielded mixed findings, both in individual therapy populations, as well as couple. This research hopes to further establish the findings shown in Stephens (2006) regarding the relationship between client symptom distress and the therapeutic alliance in couple therapy, as well as the mediating effect of client stage of change illustrated by Taft et al. (2004). Specifically, this research hypothesizes that there exists a significant negative relationship between client symptom distress and the therapeutic alliance in couple therapy (see Figure 1, Path A). In addition, as client stage of change has been shown to be positively related to the therapeutic alliance in individual therapy, this research hypothesizes that client stage of change is significantly and positively related to the therapeutic alliance in couple therapy (see Figure 1, Path B). It is also hypothesized that females will enter therapy at a higher stage of change than will males. Finally, as some research has found only client stage of change to be important to the alliance, and not client symptom distress, and as Taft et al. (2004) found stage of change to mediate the relationship between personality disorder features and the alliance, this research hypothesizes that client stage of change will have a mediating effect on the relationship between client symptom distress and the therapeutic alliance in couples therapy (see Figure 1, Path C).

Figure 1. Hypothesized Path Diagram: Client symptom distress and the therapeutic alliance, as mediated by stage of change



METHOD

Data collection for this study was completed at the Auburn University Marriage and Family Therapy Center in Auburn Alabama. This center is the on-campus training clinic for the Commission on Accreditation for Marriage and Family Therapy Education accredited Marriage and Family Therapy Master's program at Auburn University, providing services to residents of the Eastern Alabama area. Therapy at the center is conducted by Master's level student therapists in training and supervised by Ph.D. level licensed Marriage and Family Therapists.

Participants

Participants for this study are composed of clients attending therapy at the Auburn University Marriage and Family Therapy Center between March 1, 2002, and April 30, 2006. These clients seek therapy for a number of reasons, including relationship counseling, behavioral problems, depression and anxiety, and general life problems. These participants are based on a convenience sample of all couples attending therapy at the Glanton House at Auburn University Marriage and Family Therapy Center. A total of 195 couples were included in this study. Of those 195, 14 were missing all data on all variables included in this study, leaving 181 couples in the final analysis. All participants who completed the necessary paperwork were included in this study. Approximately 81% of males and 79% of females identified as White, and 15% of males and 14% of females identified as African American. The average age for males was 31½ and 29½ for

females. Males and females on average completed high school and reported an average annual income of \$25,000 or less. Full details of participants are included in Table 1.

Table 1
Demographics of males and females in committed relationships

Demographics	Males		Females	
	N	Percent	N	Percent
Age Group				
17-29	81	47.5%	96	55.2%
30-39	58	33.3%	59	33.9%
40-49	27	15.5%	13	7.4%
50 or above	8	4.6%	6	3.4%
Racial Group				
White	133	81.6%	134	79.8%
African American	24	14.7%	24	14.3%
Hispanic/Non-White	4	2.5%	5	3.0%
Asian	2	1.2%	5	3.0%
Income Category				
Less than \$10,000	31	19.5%	35	22.0%
\$10,001 to \$20,000	35	22.0%	30	18.9%
\$20,001 to \$30,000	28	17.6%	28	17.6%
\$30,001 to \$40,000	24	15.1%	27	17.0%
Over \$40,000	41	25.8%	39	24.5%
Client Education				
GED/High School	66	40.0%	66	40.0%
Vocational/Associates	32	19.4%	27	16.4%
Bachelor's Degree	41	24.8%	23	13.9%
Master's Degree	12	7.2%	22	13.3%
Other	14	8.5%	9	5.5%

As with any study, there were some participants who dropped out before completion. For this study, drop out was defined as those participants who have no 4th

session Couple Therapy Alliance scores, either due to participants not completing paperwork, or due to therapist non-compliance with 4th session protocol. Chi-square tests and t-tests were conducted to determine if there were any significant differences between participants who completed the study and those who dropped out. Results, as shown in Table 2, reveal no significant difference on demographic variables between those who completed and those who did not. In other words, any difference that may exist between those who completed and those who did not is most likely due to chance. Univariate statistics and chi-square values are detailed in Table 2.

Procedure

Upon entering therapy, each participant was given intake paperwork, consisting of informed consent paperwork and a demographic questionnaire, the University of Rhode Island Change Assessment (URICA; McConaughy et al., 1983) (Appendix A), used to measure client stage of change, and demographic questionnaires. Symptom distress was also measured at intake by using the Outcome Questionnaire (OQ-45.2; Lambert et al., 1996) (Appendix C). In order to assess for the therapeutic alliance, at the 4th session each participant was given the Couple's Therapy Alliance Scale—Revised (CTAS-R; Pinsof, 1994) (Appendix B) as well as at each subsequent 4th session. Participants were seen by Masters level student therapists, typically weekly, who were supervised by licensed, Ph.D. level marriage and family therapists. Specific therapeutic approach varied according to therapist and supervisor preference.

Table 2
Univariate Statistics and chi-square values comparing completers and drop outs

Demographic	Males	χ^2 /t-score	Females	χ^2 /t-score
Age		- .40 ^a		-.27 ^a
Mean	31.44		29.55	
SD	8.59		8.07	
Race		7.18		3.33
Mean	1.30		1.39	
SD	0.84		0.99	
Income		6.63		3.81
Mean	5.47		5.35	
SD	2.82		2.89	
Education		12.09		11.00
Mean	5.55		5.69	
SD	1.91		1.88	

* $p < .05$

^a Denotes t-score

Measures

University of Rhode Island Change Assessment (URICA). (Appendix A) At every 4th session, each participant completed the URICA (McConaughy et al., 1983). The URICA is designed to assess participants' stage of change. It is broken down into 4 subscales: Precontemplation ("As far as I'm concerned, I don't have any problems that need changing," "Being here is pretty much a waste of time for me because the problem

doesn't have to do with me"), Contemplation ("I think I might be ready for some self-improvement," "I wish I had more ideas on how to solve the problem"), Action ("I am doing something about the problems that had been bothering me," "Anyone can talk about changing; I am actually doing something about it"), and Maintenance ("It worries me that I might slip back on a problem I have already changed, so I am here to seek help," "I may need a boost right now to help me maintain the changes I've already made"). The instrument consists of 32 continuous items. Items are rated on a 5-point Likert scale. Internal consistency for the URICA has been reported as ranging from .88-.89 (Willoughby & Edens, 1996). For the purposes of this study, client Stage of Change was separated into 2 stages: Precontemplation and Motivation, a continuous variable consisting of Contemplation, Action, and Maintenance. Corresponding items for these variables are detailed in Appendix A. Cronbach's Alphas for these groupings are .87 and .88 for male Precontemplation and Motivation, respectively, and .73 and .81 for female Precontemplation and Motivation, respectively. Justification for this grouping is based on the work of previous research (Derisley & Reynolds, 2002; Rochlen et al., 2005) and discussed in detail in the results section.

Couple's Therapy Alliance Scale—Revised (CTAS-R). (Appendix B) At every 4th session, participants filled out the CTAS-R (Pinsof, 1994). The CTAS-R is designed to measure how well the participant and the therapist were able to work together. It is broken down into three subscales: Goals ("The therapist and I are not in agreement about the goals for this therapy," "The therapist understands my goals in therapy."), Tasks ("The therapist and I are in agreement about the way the therapy is being conducted," "The people important to me would approve of the way my therapy is being conducted"),

and Bonds (“I do not care about the therapist as a person,” “The therapist cares about my important relationships”). This is a 40 item instrument. Items are scored on a 7-point Likert scale. Reliability of this instrument has been reported at .83 for the individual measure (Pinsof, 1994). Cronbach’s Alphas for this study are estimated at .96 for males and .97 for females.

Outcome Questionnaire (OQ-45.2). (Appendix C) Clients completed the OQ-45.2 (Lambert et al., 1996) at every 4th session. This measure was designed to measure clients’ progress in treatment. This measure consists of 45 items broken down into three subscales: Symptom Distress, Interpersonal Relations, and Social Role. The Symptom Distress subscale consists of 25 questions assessing for symptom distress in terms of anxiety and depression (“I tire quickly,” “I feel worthless,” “I feel that something bad is going to happen”). The Interpersonal Relations subscale is an 11 item scale. This subscale measures satisfaction with, as well as problems with interpersonal relations (“I get along well with others,” “I have an unfulfilling sex life”). The Social Role subscale is a 9 items scale measuring level of dissatisfaction, conflict, distress, and inadequacy in home, family, work, and leisure tasks (“I work/study too much,” “I enjoy my spare time”). Items for this scale are scored on a 5-point Likert scale ranging from 0-4. Each subscale can be scored individually, in addition to a total score. Reliability for this instrument has been ranged from .70 to .91 (Internal Consistency) and from .78 to .84 (Test-Retest) (Lambert et al., 1996). Cronbach’s Alphas for this study are estimated at .96 for males and .97 for females.

Plan of Analysis

This study proposes that client stage of change will act as a mediating variable between client symptom distress and the therapeutic alliance. A variable is said to act as a mediator when that variable accounts for the relation between the independent and dependent variable. According to Baron and Kenny (1986), in order for a variable to function as a mediator, three conditions must be met:

1. The independent variable (client symptom distress) must be significantly related to the hypothesized mediator (client stage of change).
2. The independent variable (client symptom distress) must be significantly related to the dependent variable (therapeutic alliance).
3. The hypothesized mediator (client stage of change) must be significantly related to the dependent variable (therapeutic alliance).

Further, Baron and Kenny state that in order for the hypothesized mediator to be determined a mediator, the relationship between the independent variable and dependent variable must be at least significantly reduced, if not reduced to zero.

This study will use these 3 criteria to determine the relationship between the independent variable, hypothesized mediator, and dependent variable. SAS will be used to examine the univariates and frequencies of the variables, as well as the demographics. Next, various models will be fit to the data to determine the relationship between the dependent, independent and mediating variables. Specifically, client symptom distress will be regressed on client stage of change. Next, therapeutic alliance will be regressed on client symptom distress. Then, therapeutic alliance will be regressed on client stage of change. Finally, therapeutic alliance will be regressed on symptom distress, this time

including client stage of change in the model as a possible mediator. Mplus will be used to fit the data for the various models. Mplus was specifically chosen for this analysis for two reasons. First, this program was chosen to allow analysis of nested couple data as individual data, creating a more accurate picture of the hypothesized relationships in couple therapy. Second, Mplus was chosen because it utilizes full information maximum likelihood (FIML) estimation (Muthen & Muthen, 1998), which allows for the inclusion of participants with missing data. In FIML estimation, observations are sorted into missing data patterns. Parameters are then estimated using *all* available data for that particular parameter (Keiley, 2007). Thus, it is possible to include those who did not fully complete all paperwork. Only those participants who did not complete any of the necessary paperwork for the variables included in this study were excluded from the final sample. Of the 195 couples in the original data set, only 14 did not complete any of the necessary paperwork, and were thus not included in the final analysis, resulting in a sample size of 181 couples.

RESULTS

The purpose of this study was to determine whether or not client stage of change mediated the relationship between client symptom distress and the therapeutic alliance. For this study, client stage of change was measured by dividing the four stages into 2 new variables, labeled Precontemplation (Precontemplation stage) and Motivation (Contemplation, Action, and Maintenance stages). Reasoning for this grouping was based on previous analyses of the URICA and the separate stages of change (Derisley & Reynolds, 2002). Derisley and Reynolds (2002) noted that there is, “no agreed protocol for scoring,” the stages of change (p. 218). And, in attempting to score the different stages, Derisley and Reynolds noted that it was possible and common for clients to score above average on multiple stages at the same time. Further, they found that the most common profile of those scoring high on multiple measures had above average scores for Contemplation, Action, and Maintenance. Finally, they noted decreasing scores on the Precontemplation stage, in contrast to increasing scores on the other stages, represent an increasing readiness to change, implying a negative correlation with the other stages.

Similar to the groupings used in this study, Rochlen, et al. (2005) looked at the relationship between the alliance and client stage of change. In their study, they also grouped client stage of change into two groups: Precontemplation, and Contemplation, Action, and Maintenance combined. Justification for this grouping was based on an analysis of differences between clients in the latter three stages. In their analysis, they

found no difference between clients on these stages across any of their predictor or outcome variables, stating, “There may be little practical utility in distinguishing between the Contemplation, Maintenance, and Action stages...,” (p. 60). They also noted that while clients in the Contemplation, Action, or Maintenance stages were not significantly different from each other, they were significantly different from those in the Precontemplation stage.

Based on findings reported by Derisley and Reynolds (2002) and Rochlen, et al. (2005), this study grouped the four stages into two new variables, Precontemplation and Motivation, representing client Stage of Change. In order to establish internal consistency for these variables, Cronbach Alphas were computed showing good reliability ranging from .73 to .88 for males and females.

Preliminary Analysis of Univariate Statistics

Once client stage of change was divided into Precontemplation and Motivation, SAS Statistical Software was used to examine the means and standard deviations for each of the variables included in the study: Stage of change (Precontemplation and Motivation), symptom distress, and therapeutic alliance scores. There were no outliers identified in the analysis of univariate statistics, and the data appear to be distributed normally. Chi-square tests were conducted to determine if any differences existed between participants who completed and those who did not, based on first session variables: symptom distress and Stage of Change. Results from the χ^2 analysis were not significant, and therefore, the null hypothesis: Participants who completed and those who did not are equal in the population, was not rejected. In other words, there was no significant difference between participants who completed the study and those who did

not on any of the first session variables included in the study. Univariate statistics and χ^2 scores are detailed in Table 3. Correlations of all variables included in the study were also examined in SAS Statistical Software and detailed in Appendix D.

Table 3
Univariate Statistics and chi-square values comparing completers and drop outs

Variable	Males	χ^2	Females	χ^2
Symptom Distress		69.94		72.38
Mean	1.30		1.54	
SD	0.57		0.61	
Precontemplation		16.20		16.54
Mean	2.12		1.79	
SD	0.71		0.45	
Motivation		45.58		26.85
Mean	3.61		3.82	
SD	0.44		0.34	

* $p < .05$

Regression Analyses

Following a preliminary analysis of univariates in SAS, a series of models was fit in Mplus to test the hypotheses, as well as meet the requirements for mediation, as set forth by Baron and Kenny (1986). In the first model, client symptom distress was regressed on client stage of change. The second model was a regression of therapeutic alliance on client symptom distress. In the third model, therapeutic alliance was

regressed on client stage of change. One final model (constrained) was then fit to determine whether females entered therapy at a higher stage of change than males.

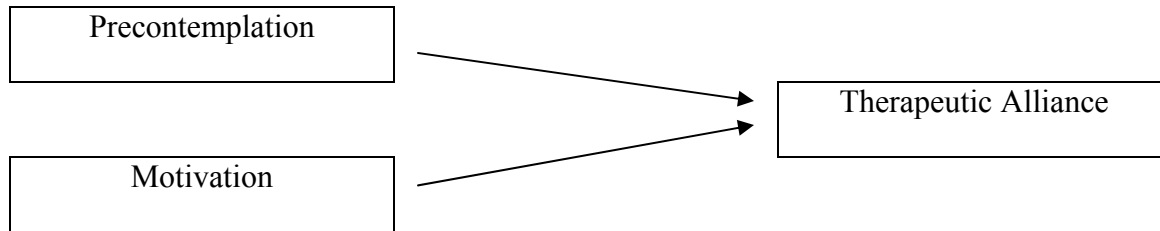
Goodness of fit between the models and the data was estimated by using the Chi-square value, the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA). A model that is a good fit for the data should have CFI and TLI values close to .95, and a non-significant Chi-square and RMSEA value. Of note, Model 2 and Model 5 resulted in significant Chi-square values. However, all other fit statistics in those models fall within the good-fit range. Fit statistics for the completed models are detailed in Table 4. Figure 2 includes a path diagram for Model 1, demonstrating how Stage of Change (Precontemplation and Motivation) was fit simultaneously. Although only Model 1 is demonstrated, each model was fit in a similar fashion. Following Table 4 and Figure 2, results from each hypothesis will be presented.

Table 4
Fit statistics for models of regression and mediation fit in Mplus

Model	CFI	TLI	χ^2	RMSEA
1. Symptom Distress on Stage of Change	0.98	0.96	5.02	0.04
2. Therapeutic Alliance on Symptom Distress	1.00	1.02	31.59***	0.00
3. Therapeutic Alliance on Stage of Change	0.94	0.86	5.56	0.06
4. Therapeutic Alliance on Stage of Change (Constrained)	0.91	0.84	26.84*	0.06

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

Figure 2: Path Diagram for Model 1



Hypothesis 1: Client symptom distress will be significantly and negatively related to the therapeutic alliance for males and females in couple therapy. In Model 2, symptom distress at intake was regressed on the alliance at fourth session. As noted in Table 4, this model was good fit for the data. Male and female data were examined simultaneously, as the data for each are linked. Results showed a significant negative relationship between male symptom distress and the therapeutic alliance ($\beta = -.58, p < .001$). Thus, controlling for all else in the model, for a one unit difference in male therapeutic alliance, there was a negative .58 unit difference in male symptom distress. Male symptom distress explained 15% of the variance in male therapy alliance ($R^2 = .15$). No significant relationship was found between female symptom distress and the therapeutic alliance.

Hypothesis 2: Client Stage of Change will be significantly and positively related to the therapeutic alliance for males and females in couple therapy. Model 3 was fit to determine any relationship that might exist between client Stage of Change and the therapeutic alliance in couple therapy. Both Precontemplation and Motivation (Contemplation, Action, Maintenance) were fit in the model at the same time, as both of these variables represent client stage of change. Further, these variables were allowed to co-vary with each other, as clients would be likely to make similar mistakes on both scales.

Again, males and females were examined at the same time, as they represent linked data. Controlling for all other variables in the model, results for males demonstrated a significant negative relationship between Precontemplation and the therapeutic alliance ($\beta = -.44, p < .05$). In short, for a one unit difference in the alliance, there is a negative .44 unit difference in Precontemplation for males in couple therapy. Precontemplation explained 7% of the variance in male therapeutic alliance ($R^2 = .065$). No significant relationship was found, however, between male Motivation and the therapeutic alliance.

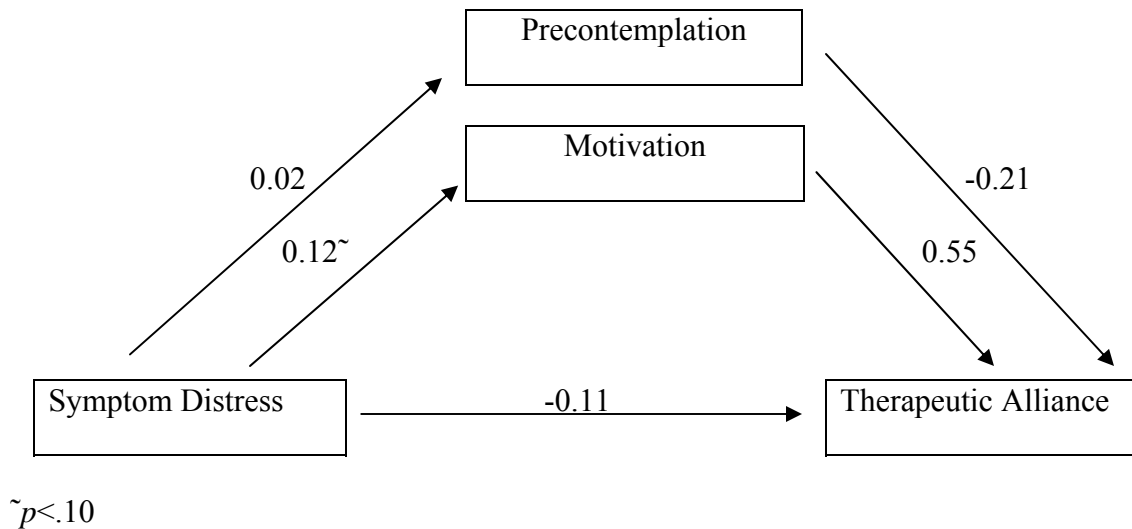
Results for females were somewhat different from that of males. While a significant relationship existed between Precontemplation and the therapeutic alliance for males, no significant relationship was found between the same variables for females. Similar to males, results also failed to demonstrate a relationship between Motivation and the therapeutic alliance for females in couple therapy. Thus, results from Model 3 failed to find any significant relationship between Stage of Change and the therapeutic alliance for females.

Hypothesis 3: The relationship between client symptom distress and the therapeutic alliance will be mediated by client Stage of Change for males and females in couple therapy. In order to determine if a mediation model was merited, an additional model was fit. In addition to fitting Models 2 and 3, Model 1 was fit to meet condition number one, as outlined by Baron and Kenny (1986). Specifically, symptom distress was regressed on Stage of Change. As with the previous models, Precontemplation and Motivation were fit in the model together and allowed to co-vary. No relationship was found between Precontemplation and symptom distress for males or females. Controlling

for all else in the model, significant results were found for both male and female participants, however, between Motivation and symptom distress. Motivation was significantly related to symptom distress for males ($\beta = .29, p < .001$), explaining 15% of the variance in Motivation ($R^2 = .151$). Therefore, for a one unit difference in Motivation, there is a positive .29 unit difference in male symptom distress. Female Motivation was also significantly related to symptom distress, though only moderately, ($\beta = .12, p < .10$), explaining 5% of the variance in Motivation ($R^2 = .047$). Thus, for a one unit difference in Motivation, there is a .12 unit difference in symptom distress.

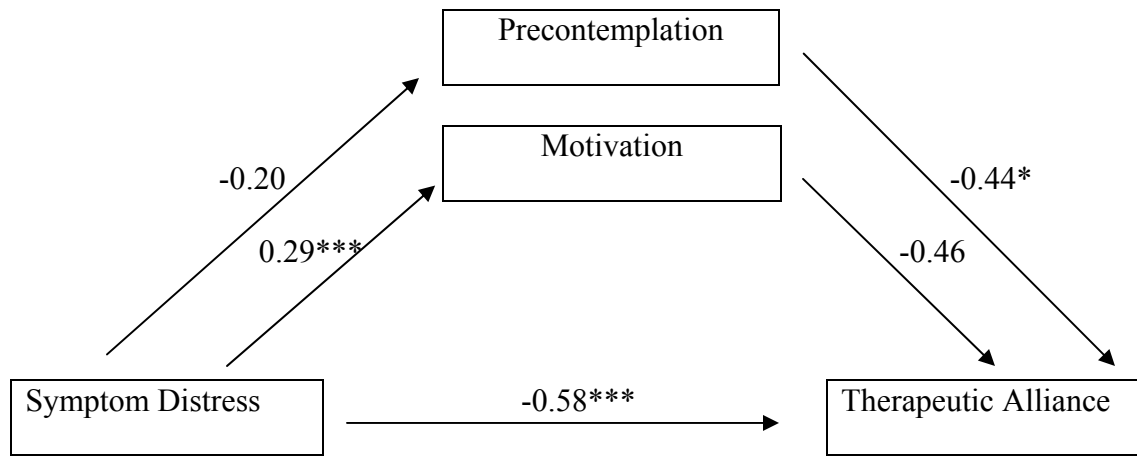
After fitting Model 1, findings from the previous models were compared in order to determine if fitting a mediation model was justified. Analysis showed that females would be dropped from the mediation model, as they failed to meet all conditions set forth by Baron and Kenny (1986) for Precontemplation; that is, there was no significant relationship found between female Precontemplation and the therapeutic alliance, symptom distress and the therapeutic alliance, or Precontemplation and symptom distress. Similarly, females failed to meet the second condition for Motivation; namely, no significant relationship was found between female Motivation and the therapeutic alliance. Therefore, no mediation can occur for females. Figure 3 details the findings from each relationship to demonstrate conditions that were and were not met, though each relationship was fit separately, and no model was fit in the fashion demonstrated. Figure 3 was drawn to simply allow the reader to see all relationships in the hypothesized mediation format to make it clear why mediation was not possible.

Figure 3. Parameter estimates from regression Models 1-3 for females



Analysis for male participants showed they also failed to meet the necessary conditions for mediation. While the second condition was met for symptom distress for males, and the first condition was met for Motivation, the third condition was not met for Motivation. Specifically, the hypothesized relationship between Motivation and the therapeutic alliance failed to reach significance. Similarly, the hypothesized relationship between Precontemplation and symptom distress failed to reach significance, violating the first condition. Figure 4 details the findings from each analysis on the hypothesized path model, illustrating the conditions that were and were not met. Again, no model was fit in this fashion. Figure 4 was drawn only to allow the reader to visualize all relationships in the hypothesized mediation model and understand why mediation was not possible.

Figure 4. Parameter estimates from regression Models 1-3 for males



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

In summary, the mediation model was not fit, due to unmet conditions. In testing for hypothesis 3, however, two other regressions were fit. No relationship was found between male Precontemplation and symptom distress for males or females. Results show, however, that on average, for both males and females, when symptom distress is high, however, that on average, for both males and females, when symptom distress is high, Motivation is high, and vice-versa.

Hypothesis 4: Females will enter couple therapy at a higher stage of change than males. One final model was fit to determine any difference in level of Motivation and Precontemplation at intake for males and females in couple therapy. In order to accomplish this, Model 3 was constrained and re-fit. To constrain Model 3 in Mplus, both male and female Precontemplation were set equal to each other and male and female Motivation were set equal to each other. After analyzing the output, a $\Delta\chi^2$ test was computed in order to determine if there was a significant difference between the two models. After completing the $\Delta\chi^2$ for Precontemplation ($\Delta\chi^2=6.44$, $df=1$, Critical χ^2

value=3.84, $p<.05$), the null hypothesis: Males and females are equal in the population, was rejected. The null hypothesis for Motivation: Males and females are equal in the population, was also rejected, based on the findings of the $\Delta\chi^2$ test for Motivation ($\Delta\chi^2=7.63$, $df=1$, Critical χ^2 value=3.84, $p<.05$).

Once the null hypotheses were rejected, the intercepts were examined in order to determine which sex entered therapy at higher levels of Precontemplation and which entered at higher levels of Motivation. Males had higher levels of Precontemplation (2.39) than females (1.79) at intake. Females, however, had higher levels of Motivation (3.64) than males (3.22) at intake.

Post Hoc Analysis

After completing the analyses described above, a post-hoc analysis was completed re-fitting the models with Precontemplation and Motivation separately. This was done in order to determine if the effects of the various models would remain the same when Stage of Change (Precontemplation and Motivation) was broken apart. Models 1 and 3 were re-fit separately as models including Precontemplation and models including Motivation. $\Delta\chi^2$ tests were then conducted on each of the models in order to determine if the models in which Precontemplation and Motivation were significantly different from the models in which they were fit simultaneously. Results from the tests show there was no significant difference between any of the models. Results from these $\Delta\chi^2$ tests are detailed in Table 5. Table 6 demonstrates the findings from the models in which Precontemplation and Motivation were fit separately. Significance levels did not change for any of the previously fit models and results were similar for the separated and simultaneous models.

Table 5

$\Delta\chi^2$, df , and Critical Value for $\Delta\chi^2$ tests for model comparisons of Precontemplation and Motivation fit simultaneously and separately

Model	$\Delta\chi^2$	df	Critical Value
1. Symptom Distress on Precontemplation	3.03	2	5.99
1. Symptom Distress on Motivation	4.75	2	5.99
3. Therapeutic Alliance on Precontemplation	4.75	2	5.99
3. Therapeutic Alliance on Motivation	1.09	2	5.99

Table 6

Parameter estimates for Models 1 and 3 with Precontemplation and Motivation fit separately for males and females

Model	Precontemplation (β)		Motivation (β)	
	Males	Females	Males	Females
1. Symptom Distress on Stage of Change	-0.20	-0.01	0.33***	0.12~
3. Therapeutic Alliance on Stage of Change	-0.25~	-0.37	0.12~	0.72~

~ $p < .10$, *** $p < .001$

In addition to an analysis comparing Stage of Change fit together and fit separately, one final post-hoc analysis was conducted. In examining the correlation table of all variables included in the study (see Appendix D), it was noted that female Motivation was correlated with male therapeutic alliance ($r = -.37$, $p < .05$), implying a

possible relationship between these two variables. In order to determine any unique variance that female Motivation may contribute to male therapeutic alliance, a regression analysis was conducted.

In this regression, female Stage of Change was regressed on male therapeutic alliance. Results showed that when controlling for all else in the model, male therapeutic alliance was significantly and negatively related to female Motivation ($\beta = -.88, p < .01$). Thus, for a one unit difference in female Motivation, there is a negative .88 unit difference in male therapeutic alliance. Furthermore, female motivation accounted for 12% of the variance in male therapeutic alliance ($R^2 = .123$).

DISCUSSION

This study examined the relationships that exist between individual client symptom distress, stage of change, and their respective contributions to the therapeutic alliance in couple therapy. Based on existing research demonstrating a relationship between client symptom distress and the alliance (Stephens, 2006) in couple therapy, and client stage of change and the alliance in individual therapy (Connors, et al., 2000), it was hypothesized that client symptom distress and stage of change would be related to the alliance in couple therapy. It was further hypothesized that a client stage of change would mediate the relationship between symptom distress and the alliance, based on a similar study conducted by Taft, et al. (2004) demonstrating a mediating relationship between client symptomatology and the alliance, as mediated by stage of change. Finally, as existing research left some questions to be answered about what might account for different findings for males and females (Stephens, 2006), it was hypothesized that females would be more motivated than males at the onset of couple therapy.

Summary of Results

Hypothesis 1. Results from Model 2 yielded partial support for Hypothesis 1. Specifically, it was found that on average, symptom distress is negatively related to the alliance in couple therapy for males, but not for females. This suggests that on average, males who suffer from high levels of depression and anxiety may have a difficult time forming an alliance with their therapist. Interestingly, though consistent with previous

research, this relationship was not found for females. Symptom distress was not found to be a significant predictor in the formation of the therapeutic alliance for females. These findings are consistent with those reported by Stephens (2006) who found that males with high levels of symptom distress as reported in first session paperwork reported lower scores of the therapy alliance at fourth session, but failed to find a similar relationship for females.

Hypothesis 2. Partial support was found for Hypothesis 2. Results demonstrated a significant negative relationship between Precontemplation and the therapeutic alliance for males; that is, on average, males who enter therapy at high levels of Precontemplation report low levels of the alliance at fourth session of therapy. This suggests that when a male enters couple therapy and is highly unmotivated to change, he may struggle to create a strong alliance with his therapist. Interestingly, the relationship between Precontemplation and the alliance did not reach significance for females. It seems the alliance may not be affected if a female were to enter therapy at high levels of Precontemplation.

Even more interestingly, Motivation, a combination of the Contemplation, Action, and Maintenance stages, was not significantly related to the alliance for males or females. In short, stage of change was not found to be a significant predictor of the therapeutic alliance. In other words, a therapist may need to focus on other areas of alliance development if her client enters therapy highly motivated to change.

Hypothesis 3. Results of the previous hypotheses failed to show support for Hypothesis 3. In Models 1, 2, and 3, both males and females failed to meet the necessary conditions to allow for mediation to occur. Specifically, there was no relationship found

between females in the Precontemplation stage and the alliance, or symptom distress. Similarly, there was no significant relationship found between the alliance and Motivation for females, nor was there a significant relationship found between female symptom distress and the alliance. Males also failed to meet the conditions of mediation. While male symptom distress and Precontemplation were significantly related to the alliance, Motivation was not.

Although a mediation model was not justified, preliminary analyses for the mediation model did yield some significant findings. Though not one of the hypotheses for this study, a significant positive relationship was found between Symptom Distress and Motivation for males and females. On average, males and females who have high levels of depression or anxiety enter therapy at high levels of motivation. No significant relationship was found, however, between Precontemplation and Symptom Distress for males or females. Although these results are significant, they are not too surprising. It is logical to think that those experiencing more distress will be more motivated to change.

Hypothesis 4. Results from Model 4 revealed full support for Hypothesis 4. On average, females enter couple therapy at higher levels of motivation than males do. In other words, females enter couple therapy at a higher stage of change than do males. In fact, similar analyses were conducted to determine if males enter therapy at higher levels of Precontemplation than females. Results showed that on average, males report higher levels of Precontemplation at intake than females. Thus, males enter couple therapy less motivated than females, on average.

Post Hoc Analysis. Findings from the correlation table (Appendix D) revealed that male therapeutic alliance and female Motivation were correlated. When male

therapeutic alliance was regressed on female Motivation, findings revealed a significant negative relationship between the two variables. On average, when females enter couple therapy at high levels of Motivation, males report low levels of therapeutic alliance, and vice-versa. Although these findings were not associated with any hypothesis of this study, they illustrate the need to better understand the nature of Stage of Change in couple therapy.

Implications and Benefits of Research Findings

This study highlights a number of findings important to the development of the therapeutic alliance in couple therapy. Particularly, this study increases understanding of contributions to the therapeutic alliance for males. One of the most outstanding contributions noted in this paper is that of female Motivation (Contemplation, Action, and Maintenance combined) on male therapeutic alliance. As noted, this is among the first studies to examine the relationship between Stage of Change and the therapeutic alliance in couple therapy. Interestingly, no significant relationship was found for females between the alliance and Precontemplation or Motivation. This is contrary to virtually all existing research on Stage of Change and the alliance in individual therapy (Connors et al., 2000; Rochlen et al., 2005; Taft et al., 2004). A negative relationship was found between male in the Precontemplation stage and the alliance, but no relationship was found for Motivation. In short, Motivation is not related to the alliance for males or females in couple therapy. It seems, contrary to findings in individual research, Stage of Change is not that important in the formation of the alliance in couple therapy.

However, one very interesting finding was noted in this study that was not originally hypothesized. Specifically, female Motivation was found to be a significantly negative predictor of male therapy alliance in couple therapy. This suggests that on average when a couple enters therapy with a highly motivated female, the male will have a more difficult time creating a relationship with the therapist. Couple those findings with the findings females enter couple therapy at higher levels of Motivation than males, and that males enter at higher levels of Precontemplation, and it becomes clear these findings illustrate the difficulty that may arise in trying to create an alliance with males in couple therapy. Furthermore, as this is among the first studies to examine this relationship in couple therapy, they highlight the importance of better understanding Stage of Change in couple therapy and how it may be affected by the interplay of partners in a couple.

In addition to the findings regarding Stage of Change, contributions to the alliance by males' symptom distress is also a highly significant finding from this research. This finding is of particular interest as virtually all of the published literature states that individual symptom distress has no bearing on the alliance in couple therapy (Knobloch-Fedders et al., 2004; Mamodhoussen et al., 2005). These findings are consistent, however, with those reported by Stephens (2006). However, this study also found that for both males and females, when symptom distress is high, motivation is high. Thus, with male symptom distress negatively influencing the alliance, while simultaneously positively influencing motivation, it would seem that the male Stage of Change would mediate the relationship between symptom distress and the alliance. However, no

mediating relationship was found. As noted previously, however, male Motivation was not found to be related to the alliance. Therefore, no mediating relationship was possible.

One possible explanation for this is that when males enter therapy at high levels of symptom distress, and are therefore highly motivated to change, they are less concerned with creating a relationship with their therapist and more concerned with solving the problem. It is very likely that males wait to enter therapy until symptom distress is high and therefore enter couple therapy highly motivated to find symptom relief. And when symptom distress reaches high enough levels, it may be that male clients simply want the problem solved and view attempts by the therapist to create an alliance as interfering with speedy progress. Whatever the explanation may be, it is clear more research is needed to discover it.

This study provides important insight into factors that might influence alliance formation for males in couple therapy. Of equal importance is the lack of findings for females. One reason for this study was to illuminate factors that may play an important role in the formation of the alliance in couple therapy. As demonstrated, this was at least partially accomplished for males. Unfortunately, virtually nothing was found for females. We do know that they tend to enter couple therapy more motivated than their male counterparts, and that their motivation influences male alliance scores. But it is still not clear what factors might influence the alliance, and therefore therapy outcomes. If this were the only study lacking in findings for females, it would not be so troubling. However, Stephens (2006) also reported a lack of findings for females in couple therapy, noting that there are questions pertaining to the alliance that remain unanswered. This study proposed that perhaps Stage of Change was the answer to some of her questions.

As findings regarding show, however, factors contributing to the alliance for females remain unclear. Again, more research is needed to fully understand what might influence alliance formation in couple therapy for females.

Limitations

Findings in this study have provided insight into alliance formation in couple therapy for males. However, these findings, like all in research, come with limitations. First, as with many studies in the social sciences, this study had no control group, possibly creating sampling bias. If a control group had been utilized, this bias could have been controlled, and the effect could have been measured more accurately. Further, the sample for this study was a convenience sample, based on clients who entered therapy of their own choice. Because it was not a random sample, it is not possible to determine whether the treatment was the cause of alliance formation or if the difference was a result of the participants themselves. Also, because clients self-selected into the study by entering therapy of their own volition, caution must be used in generalizing the results. This study also had a relatively small sample size, which may further impede the generalizability of these findings to the entire population of people who receive therapy.

Another limitation that must be addressed is regarding sample size. This study used data from 181 couples, a relatively small sample size. Without a larger sample, the results of this study may be underpowered. Based on the fit statistics reported, as well as the number of relationships in this study that were approaching significance, an increase in sample size may yield different results. In other words, relationships that were found to not be significant may reach significance, given a larger sample size, possibly allow for the hypothesized mediation relationship to occur. Furthermore, the sample included

in this study was a dyadic sample. Thus, due to the dyadic nature of the data, more subjects could possibly allow a more thorough and accurate analysis of the hypothesized relationships.

Data for this study was gathered by way of client's self-report questionnaires. Though a commonly accepted and used method of data collection in the social sciences, there is always some limitation in using self-report questionnaires, as the data is not objectively measured. Additionally, the independent variables, symptom distress and stage of change, were only measured at the first session and the dependent variable, therapy alliance, was measured after the fourth. Measuring the variables at different times could possibly result in different findings. Further, the majority of existing research measures the alliance after the third session, as opposed to the fourth. Although only one session different, gathering data at a different session may yield different results.

Finally, as noted previously, self-report questionnaires were used to attempt to capture client behaviors. This may be especially difficult with the therapy population, as at any point, clients may decide to drop out, not complete paperwork, or not complete paperwork accurately. Further, therapists may impede the data collection process by neglecting to follow client paperwork procedures. There was no control utilized for the possible confounding influence of therapist features in this study. Therefore, in order for the findings of this research to be generalizable beyond East Alabama residents who received treatment at the Auburn University Marriage and Family Therapy Center, further analysis and replication is needed.

Future Research

This study was among the first to examine client stage of change in couple therapy. Client stage of change is an area that may have important implications on the therapy alliance in couple therapy, and therefore, further research is needed. The majority, if not all, of the existing literature on Stage of Change is based on findings from individual therapy, often with very specific problems (i.e. eating disorders, addictions, violence). The post-hoc findings of this study reveal there is much more to be studied and understood about Stage of Change in couple therapy. Specifically, more research is needed to replicate findings from this study, as well as better understand how two partners with different stages of change might influence each other and outcomes. The nature of couple therapy and how that might interact and influence different variables merits further study.

Similarly, relatively little is understood about the relationship between symptom distress and the alliance in couple therapy. Findings from this study of a significant relationship for males are consistent with previous findings from one other study (Stephens, 2006). As male symptom distress has been found to be an important factor in alliance formation in couple therapy, future research should focus on better defining and understanding this relationship. Furthermore, future research should focus on better understanding the relationship that exists between client symptom distress and Stage of Change, both in couple therapy, as well as individual therapy.

In particular, this relationship needs to be examined more closely for females. Particularly, if symptom distress is not an important factor for females in couple therapy alliance, research needs to explore what factors might be. The lack of findings for

females highlight the need to better understand what these factors might be and how they contribute to the alliance in couple therapy. From previous findings, reasons for lack of findings for female alliance in couple therapy remain unclear; the case is far from closed. Thus, there is hope in furthering the understanding of differences such as these between males and females in conjoint treatment. Such research should shy away from impulsive conclusions and focus on providing depth and meaning to the alliance research in couple therapy, while simultaneously providing clinicians with direction and focus to better therapy outcomes.

REFERENCES

- Alden, L. E., Wiggins, J. S., & Pincus, A. L. (1990). Construction of circumplex scales for the Inventory of Interpersonal Problems. *Journal of Personality Assessment*, 55, 521–536.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed. Revised). Washington, DC: Author.
- 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(6), 1173-1182.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Bedi, P. R., David, M. D., & Williams, M. (2005). Critical incidents in the formation of the therapeutic alliance from the client's perspective. *Psychotherapy: Theory, Research, Practice, Training*, 42, 311-323.
- Begun, A. L., Murphy, C. M., Bolt, D., Weinstein, B., Strodthoff, T., Short, L., & Shelley, G. (2003). Characteristics of the Safe at Home instrument for assessing readiness to change intimate partner violence. *Research on Social Work Practice*, 13, 80–107.
- Bordin, E. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice*, 16, 252-260.

- Castonguay, L. G., Goldfried, M. R., Wiser, S., Raue, P. J., & Hayes, A. M. (1996). Predicting the effect of cognitive therapy for depression: A study of unique and common factors. *Journal of Consulting and Clinical Psychology, 64*, 497-504.
- Coady, N. (1993). The worker-client relationship revisited. *Families in Society: The Journal of Contemporary Human Services, 32*, 291-299.
- Connors, G. J., DiClemente, C. C., Dermen, K. H., Kadden, R., Carroll, K. M., & Frone, M. R. (2000). Predicting the therapeutic alliance in alcoholism treatment. *Journal of Studies on Alcohol, 61*, 139-149.
- Constantino, M. J., Arnow, B. A., Blasey, C., & Agras, W. S. (2005). The association between patient characteristics and the therapeutic alliance in cognitive behavioral and interpersonal therapy for bulimia nervosa. *Journal of Consulting and Clinical Psychology, 73*, 203-211.
- Derisley, J., & Reynolds, S. (2002). Evaluation of the stages of change scales to measure client readiness for treatment in a mental health sample. *Behavioural and Cognitive Psychotherapy, 30*, 217-222.
- Derogatis, L. R. (1977). *The SCL-90R Manual I: Scoring, administration, and procedures for the revised version*. Baltimore, MD: Clinical Psychometrics Unit, Johns Hopkins University School of Medicine.
- Derogatis, L. R. (2001). Brief symptom inventory. *Brief symptom inventory—18: Administration, scoring, and procedures manual-II*. Minneapolis, MN: National Computing Systems.

- Derogatis, L. R., Lipman, R. S., Rickels, K., Uhlenhuth, E. R., & Covi, I. (1974). The Hopkins Symptom Checklist (HSCL): A self-report symptom inventory. *Behavioral Science, 19*, 1-15.
- Dew, S. E., & Bickman, L. (2005). Client expectancies about therapy. *Mental Health Services Research, 7*, 21-33.
- Eaton, T. T., Abeles, N., & Gutfreund, M. J. (1988). Therapeutic alliance and outcome: Impact of treatment length and pretreatment symptomatology. *Psychotherapy, 25*, 536-542.
- Eckert, P., Abeles, N., & Graham, R. (1988). Symptom severity, psychotherapy process, and outcome. *Professional Psychology, 19*(5), 560-564.
- Epstein, N. B., Baldwin, L. M., & Bishop, D. S. (1983). The McMaster Family Assessment Device. *Journal of Marital and Family Therapy, 9*, 171-180.
- Garfield, R. (2004). The therapeutic alliance in couple's therapy: Clinical considerations. *Family Process, 43*(4), 457-465.
- Hare, R. D. (1990). *The Self-Report Psychopathy Scale-II*. Unpublished Test, Department of Psychology, University of British Columbia, Vancouver, Canada.
- Heatherington, L., & Friedlander, M. L. (1990). Complementarity and symmetry in family therapy communication. *Journal of Counseling Psychology, 37*(3), 261-268.
- Horvath, A. O. (2001). The alliance. *Psychotherapy: Theory, Research, Practice, Training, 38*, 365-372.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology, 36*, 223-233.

- Horvath, A. O., & Luborsky, L. (1993). The role of the therapeutic alliance in psychotherapy. *Journal of Consulting and Clinical Psychology, 61*, 561-573.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*, 139-149.
- Howard, K. I., Brill, P. L., Lueger, R. J., O'Mahoney, M. T., & Grissom, G. R. (1995). *Integraoutpatient tracking assessment*. Philadelphia: Compass Information Services.
- Johnson, S. M., & Taliman, E. (1997). Predictors of success in emotionally focused marital therapy. *Journal of Marital and Family Therapy, 23*, 135-152.
- Keiley, M. (2007). Multiple-family group intervention for incarcerated adolescents and their families: A pilot project. *Journal of Marital and Family Therapy, 33*, 106-124.
- Knobloch-Fedders, L., Pinsof, W., & Mann, B. (2004). The formation of the therapeutic alliance in couple therapy. *Family Process, 43*(4), 425-442.
- Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training, 38*, 357-361.
- Lambert, M. J., Hansen, N. B., Umpruss, V., Lunnen, K., Okiishi, J., Burlingame, G. M., et al. (1996). Administration and scoring manual for the OQ-45.2 (outcome questionnaire). Stevenson, MD: American Professional Credentialing Services LLC.

- Mamodhousen, S., Wright, J., Tremblay, N., & Poitras-Wright, H. (2005). Impact of marital and psychological distress on therapeutic alliance in couples undergoing couple therapy. *Journal of Marital and Family Therapy*, 2, 159-169.
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68, 438-450.
- Marziali, E. (1984). Three viewpoints on the therapeutic alliance. *Journal of Nervous and Mental Disease*, 172, 417-423.
- McConaughy, E. A., Prochaska, J. O., & Velicer, W. F. (1983). Stages of change in psychotherapy: Measurement and sample profiles. *Psychotherapy: Theory, Research & Practice*, 20, 368-375.
- Miller, I. W., Epstein, N. B., Bishop, D. S., & Keitner, G. I. (1985). The McMaster Family Assessment Device: Reliability and validity. *Journal of Marital and Family Therapy*, 11, 345-356.
- Miller, W. R., Tonigan, J. S., Longabaugh, R. (1995). *The drinker inventory of consequences (DrInC): An instrument for assessing adverse consequences of alcohol abuse (test manual)*. NIAAA Project Match Monograph Series, 4, NIH Publication No. 95-3911, Rockville, MD: Department of Health and Human Services.
- Muthen, L. K., & Muthen, B. O. (1998). *Mplus user's guide*. Los Angeles: Muthen & Muthen (Website: <http://www.statmodel.com>).

- Oldham, J., Clarkin, J., Appelbaum, A., Carr, A., Kernberg, P., Lotterman, A., & Haas, G. (1985). A self-report instrument for borderline personality organization. In T. H. McGlashan (Ed.), *The borderline: Current empirical research* (pp. 1–18). Washington, DC: American Psychiatric Press.
- Pinsof, W. M. (1994). An integrative systems perspective on the therapeutic alliance: Theoretical, clinical, and research implications. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 174-195). New York: Wiley.
- 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.
- Principe, J. M., Marci, C. D., Glick, D. M. (2006). The relationship among patient contemplation, early alliance, and continuation in psychotherapy. *Psychotherapy: Theory, Research, Practice, Training, 43*, 238-243.
- Prochaska, J. O., & Norcross, J. C. (2001). Stages of change. *Psychotherapy: Theory, Research, Practice, Training, 38*, 443-448.
- Raue, P., Castonguay, L., & Goldfried, M. (1993). The working alliance: A comparison of two therapies. *Psychotherapy Research, 3*(3), 197-207.
- Rochlen, A. B., Rude, S. S., & Baron, A. (2005). The relationship of client stages of change to working alliance and outcome in short-term counseling. *Journal of College Counseling, 8*, 52-64.
- Snyder, D.K. (1997). *Manual for the Marital Satisfaction Inventory-Revised*. Los Angeles: Western Psychological Services.

- 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.
- Spitzer, R. L., & Williams, J. B. W. (1985). *Structured clinical interview for DSM-III-R, patient version*. New York: Biometric Research Department, New York State Psychiatric Institute.
- Stephens, M. (2006). *Marital adjustment as a mediating factor between symptom distress and therapeutic alliance formation in couple's therapy*. Unpublished master's thesis, Auburn University, Auburn, Alabama.
- Taft, C. T., Murphy, C. M., Musser, P. H., & Remington, N. A. (2004). Personality, interpersonal, and motivational predictors of the working alliance in group cognitive-behavioral therapy for partner violent men. *Journal of Consulting and Clinical Psychology*, 72, 349-354.
- Thomas, S. E.G., Werner-Wilson, R. J., & Murphy, M. J. (2005). Influence of therapist and client behaviors on therapy alliance. *Contemporary Family Therapy: An International Journal*, 27, 19-35.
- Wanberg, K. W., Horn, J. L., Foster, F. M. (1977). A differential assessment model for alcoholism: The scales of the Alcohol Use Inventory. *Journal of Studies on Alcohol*, 38, 512-543.
- Willoughby, F. W., & Edens, J. F. (1996). Construct validity and predictive utility of the stage of change scale for alcoholics. *Journal of Substance Abuse*, 8, 275-291.

Wintersteen, M. B., Mensinger, J. L., & Diamond, G. S. (2005). Do gender and racial differences between patient and therapist affect therapeutic alliance and treatment retention in adolescents? *Professional Psychology: Research and Practice, 36*, 400-408.

APPENDIX A

For the purposes of this study, the four stages of the Stage of Change scale were grouped into two stages: Precontemplation (items 1, 5, 11, 13, 23, 26, 29 & 31), and Motivation, a continuous variable consisting of Contemplation, Action, and Maintenance (items 2, 3, 4, 6, 7, 8, 9, 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 27, 28, 30, & 32).

The University of Rhode Island Change Assessment (URICA)

The following questions ask you to provide information about yourself and will be used by your therapist to better serve your therapeutic needs. Please answer each question as completely and honestly as possible. If a question does not apply to you write NA for Not Applicable. All information is confidential.

This questionnaire is to help us improve services. Each statement describes how a person might feel when starting therapy or approaching problems in their lives. Please indicate the extent to which you tend to agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel. "Here" refers to the place of treatment or the problem.

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

- | | | | | | |
|---|---|---|---|---|---|
| 1. As far as I'm concerned, I don't have any problems that need changing. | 1 | 2 | 3 | 4 | 5 |
| 2. I think I might be ready for some self-improvement. | 1 | 2 | 3 | 4 | 5 |
| 3. I am doing something about the problems that had been bothering me. | 1 | 2 | 3 | 4 | 5 |
| 4. It might be worthwhile to work on my problem. | 1 | 2 | 3 | 4 | 5 |
| 5. I'm not the problem one. It doesn't make much sense for me to be here. | 1 | 2 | 3 | 4 | 5 |
| 6. It worries me that I might slip back on a problem I have already changed, so I am here to seek help. | 1 | 2 | 3 | 4 | 5 |
| 7. I am finally doing some work on my problem. | 1 | 2 | 3 | 4 | 5 |
| 8. I've been thinking that I might want to change something about myself. | 1 | 2 | 3 | 4 | 5 |
| 9. I have been successful in working on my problem but I'm not sure I can keep up the effort on my own. | 1 | 2 | 3 | 4 | 5 |
| 10. At times my problem is difficult, but I'm working on it. | 1 | 2 | 3 | 4 | 5 |
| 11. Being here is pretty much a waste of time for me because the problem doesn't have to do with me. | 1 | 2 | 3 | 4 | 5 |
| 12. I'm hoping that this place will help me to better understand myself. | 1 | 2 | 3 | 4 | 5 |
| 13. I guess I have faults, but there's nothing that I really need to change. | 1 | 2 | 3 | 4 | 5 |
| 14. I am really working hard to change. | 1 | 2 | 3 | 4 | 5 |
| 15. I have a problem and I really think I should work at it. | 1 | 2 | 3 | 4 | 5 |
| 16. I'm not following through with what I had already changed as well as I had hoped, and I'm here to prevent a relapse of the problem. | 1 | 2 | 3 | 4 | 5 |

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

17.	Even though I'm not always successful in changing, I am at least working on my problems.	1	2	3	4	5
18.	I thought once I had resolved my problem I would be free of it, but sometimes is still find myself struggling with it.	1	2	3	4	5
19.	I wish I had more ideas on how to solve the problem.	1	2	3	4	5
20.	I have started working on my problems but I would like help.	1	2	3	4	5
21.	Maybe this place will be able to help me.	1	2	3	4	5
22.	I may need a boost right now to help me maintain the changes I've already made.	1	2	3	4	5
23.	I may be part of the problems, but I don't really think I am.	1	2	3	4	5
24.	I hope that someone here will have some good advice for me.	1	2	3	4	5
25.	Anyone can talk about changing; I'm actually doing something about it.	1	2	3	4	5
26.	All this talk about psychology is boring. Why can't people just forget about their problems?	1	2	3	4	5
27.	I'm here to prevent myself from having a relapse of my problem.	1	2	3	4	5
28.	It is frustrating, but I feel I might be having a recurrence of a problem I thought I had resolved.	1	2	3	4	5
29.	I have worries but so does the next guy. Why spend time thinking about them?	1	2	3	4	5
30.	I am actively working on my problem.	1	2	3	4	5
31.	I would rather cope with my faults than try to change them.	1	2	3	4	5
32.	After all I had done to try to change my problem, every now and again it comes back to haunt me.	1	2	3	4	5

APPENDIX B

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 extremes.

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

16. The therapist does not understand me.	7	6	5	4	3	2	1
17. The therapist is helping my partner and me with our relationship.	7	6	5	4	3	2	1
18. I am not satisfied with the therapy.	7	6	5	4	3	2	1
19. My partner and I understand what each of us is doing in this therapy.	7	6	5	4	3	2	1
20. My partner and I do not accept each other in this therapy.	7	6	5	4	3	2	1
21. The therapist understands my partner's goals for this therapy.	7	6	5	4	3	2	1
22. I do not feel accepted by the therapist.	7	6	5	4	3	2	1
23. The therapist and I are in agreement about the way the therapy is being conducted.	7	6	5	4	3	2	1
24. The therapist is not helping me.	7	6	5	4	3	2	1
25. The therapist is in agreement with the goals that my partner and I have for ourselves as a couple in this therapy.	7	6	5	4	3	2	1
26. The therapist does not care about my partner as a person.	7	6	5	4	3	2	1
27. My partner and I are in agreement with each other about the goals of this therapy.	7	6	5	4	3	2	1
28. My partner and I are not in agreement about the things that each of us needs to do in this therapy.	7	6	5	4	3	2	1
29. The therapist has the skills and ability to help me.	7	6	5	4	3	2	1
30. The therapist is not helping my partner.	7	6	5	4	3	2	1
31. My partner is satisfied with the therapy.	7	6	5	4	3	2	1
32. I do not care about the therapist as a person.	7	6	5	4	3	2	1
33. The therapist has the skills and ability to help my partner.	7	6	5	4	3	2	1
34. My partner and I are not pleased with the things that each of us does in this therapy.	7	6	5	4	3	2	1
35. My partner and I trust each other in this therapy.	7	6	5	4	3	2	1
36. My partner and I distrust the therapist.	7	6	5	4	3	2	1
37. The therapist cares about the relationship between my partner and myself.	7	6	5	4	3	2	1
38. The therapist does not understand my partner.	7	6	5	4	3	2	1
39. My partner and I care about each other in this therapy.	7	6	5	4	3	2	1
40. The therapist does not appreciate how important my relationship between my partner and myself is to me.	7	6	5	4	3	2	1

APPENDIX C

Outcome Questionnaire (OQ®-45.2)

Instructions: Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under the category which best describes your current situation. For this questionnaire, work is defined as employment, school, housework, volunteer work, and so forth.

Never Rarely Sometimes Frequently Almost Always

1. I get along well with others
2. I tire quickly
3. I feel no interest in things
4. I feel stressed at work/school
5. I blame myself for things
6. I feel irritated
7. I feel unhappy in my marriage/significant relationship
8. I have thoughts of ending my life
9. I feel weak.
10. I feel fearful
11. After heavy drinking, I need a drink the next morning to get going. (If you do not drink, mark "never")
12. I find my work/school satisfying
13. I am a happy person.
14. I work/study too much
15. I feel worthless.
16. I am concerned about family troubles
17. I have an unfulfilling sex life.
18. I feel lonely
19. I have frequent arguments.
20. I feel loved and wanted
21. I enjoy my spare time
22. I have difficulty concentrating
23. I feel hopeless about the future
24. I like myself
25. Disturbing thoughts come into my mind that I cannot get rid of
26. I feel annoyed by people who criticize my drinking (or drug use) (If not applicable, mark "never")
27. I have an upset stomach

28. I am not working/studying as well as I used to
29. My heart pounds too much
30. I have trouble getting along with friends and close acquaintances
31. I am satisfied with my life
32. I have trouble at work/school because of drinking or drug use (If not applicable, mark "never")
33. I feel that something bad is going to happen
34. I have sore muscles
35. I feel afraid of open spaces, of driving, or being on buses, subways, and so forth.
36. I feel nervous
37. I feel my love relationships are frill and complete
38. I feel that I am not doing well at work/school
39. I have too many disagreements at work/school
40. I feel something is wrong with my mind
41. I have trouble falling asleep or staying asleep
42. I feel blue
43. I am satisfied with my relationships with others.
44. I feel angry enough at work/school to do something I might regret
45. I have headaches

APPENDIX D

SAS Statistical Software does not utilize FIML, and therefore has smaller sample sizes for certain correlations than those in Mplus, possibly influencing the significance of the relationships. Mplus also outputs correlation matrices, but does not include p values. Therefore, data from SAS were used.

Pearson Correlation Coefficients for Male and Female Precontemplation, Motivation, Symptom Distress, and Therapeutic Alliance

Variable	1	2	3	4	5	6	7	8
1. Male Pre. First Session	1.00							
2. Male Mot. First Session	-.71***	1.00						
3. Female Pre. First Session	.22*	-.26*	1.00					
4. Female Mot. First Session	-.14	.25	-.42***	1.00				
5. Female SD First Session	.03	-.20~	.02	.19~	1.00			
6. Male SD First Session	-.18~	.41***	-.11	.08	.34***	1.00		
7. Male TA Fourth Session	-.26	-.09	-.03	-.37*	-.23~	-.39***	1.00	
8. Female TA Fourth Session	-.09	-.05	-.15	.11	-.15	.19	.52***	1.00

~ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Pre.= Precontemplation, Mot.=Motivation, SD=Symptom Distress, TA=Therapeutic Alliance