Therapeutic Alliance and Outcomes: The Moderating Role of Therapist Sex

by

Elise Mauren

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Approved by

Thomas A. Smith, Chair, Associate Professor, Human Development and Family Studies Scott A. Ketring, Associate Professor, Human Development and Family Studies Lee N. Johnson, Associate Professor, Human Development and Family Science, University of Georgia

Abstract

The purpose of the study was to explore the relationship between therapeutic alliance (between system and within system) and therapeutic outcomes (individual distress and relational satisfaction) for males and females. Interactions between outcome variables and alliance ratings for men and women were analyzed to assess moderation effects of therapist sex. Data were collected from 2002 to 2011 from clients presenting for couples therapy at a marriage and family therapist training clinic at a southeastern university. The therapeutic alliance was found to be a strong predictor of therapeutic outcomes, specifically relational satisfaction for males and females using a dyadic model to assess for actor and partner effects. One actor effect was detected with individual distress as the outcome. The within system alliance was a stronger predictor of relational satisfaction outcomes and produced two actor effects and one partner effect. Moderation effects for therapist sex were found for both actor and partner effects when relational satisfaction was the outcome.

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Introduction

The therapeutic alliance is one of the most widely researched processes of change (Castonguay et al., 1996; Martin, Garske, & Davis, 2000). Initially a psychoanalytic term, the concept of the alliance has changed considerably since Freud maintained that the positive relationship was an intervention working against the individual's neurosis (1912). The term working alliance was coined by Greenson (1967) to describe the relationship as vital to establishing positive collaboration for successful therapy. Alliance has been described as a therapist-offered condition; the ability to be empathetic and maintain unconditional positive regard was the responsibility of the practitioner to ensure progress (Rogers, 1957; Barrett-Lennard, 1978). Interest in the relational factors between therapist and clients in psychotherapy led to the development of the "working alliance", a formulation of the dynamics in therapy. The working alliance in itself is not therapeutic but allows for interventions and the therapeutic process to be successful (Bordin, 1975).

The therapeutic working relationship between client and therapist, forged through empathy, warmth, sincerity, flexibility, honesty, respect and trustworthiness is collaborative in nature. It supports an affective bond between client and therapist, and through the alliance, an agreement is achieved and maintained concerning treatment goals and tasks (Ackerman & Hilsenroth, 2003; Bordin, 1979; Gaston, 1990; Horvath & Symonds, 1991).

The clinical implications of alliance led to interest in the relationship between alliance and therapeutic outcomes. Meta-analyses followed indicating that 2.5-7% of outcome variance can be attributed to therapeutic alliance (Horvath & Bedi, 2002; Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). The therapeutic alliance consistently remains a predictor of change in psychotherapy (Castonguay & Beutler, 2005). Across psychotherapy orientations,

therapeutic alliance explains a significant amount of variance in outcome, forcing researchers to look at overarching variables rather than the precise interventions of a given modality (Muran & Safran, 1995). Blow, Sprenkle and Davis (2007) believe in overarching elements of effective models, or common factors, rather than specific interventions found in disparate modalities. Studies continue to illustrate that the therapeutic relationship is a robust predictor of outcomes (Symonds & Horvath, 2004), and therefore the strength of the relationship facilitated by the therapist, through the eyes of the client, remains an important element of successful therapy (Horvath & Greenberg, 1994).

Although the evidence for the therapeutic alliance as a predictor of outcome appears robust, some researchers maintain that there are aspects of alliance research left wanting. Crits-Christoph, Connolly-Gibbons, and Hearon (2006) suggest that limited consideration of other variables and reverse causation, in addition to poor statistical analyses contribute to limitations in the literature. Studies are lacking in the application of technique and adherence to models as means to measure process and treatment outcomes (Orlinsky, Grawe & Parks, 1994). Barber, Crits-Christoph and Luborsky (1996) posit that there are other specific therapist variables, including sex, age and competence in therapeutic interventions that may influence therapy outcomes. Conclusions reached include reflections on findings that suggest there are specific factors beyond non-specific therapist general skills and alliance that significantly contribute to successful outcomes in therapy.

Most of the literature suggesting a strong relationship between alliance and outcome has been conducted in individual psychotherapy. In individual psychotherapy, therapeutic alliance is a robust predictor of outcomes, a principle that cuts across orientation, population and modality (Horvath & Bedi, 2002; Horvath & Symonds, 1991; Martin, Gaske, & Davis, 2000). Horvath

(2000) noted that although there are thousands of manuscripts concerned with alliance, there are only 50 data sets used for couple alliance investigation. The couple is defined as a unit, distinct from the individuals (Horvath, Symonds & Tapia, 2010; Pinsof & Catherall, 1986). Horvath, Symonds and Tapia (2010) noted "the client-as-a-couple" is a systemic concept that has been used as a way of underscoring the idea that the couple is more than the sum of its individual parts. The deficits in couple alliance are not limited to literature; the effect size between alliance and outcome are generally lower in couple therapy than individual therapy (Coupland & Serovich, 1999; Symonds & Horvath, 2004). The complex nature of outcomes and multiple persons could be a plausible reason for a lower effect size in couple therapy (Horvath, Symonds & Tapia, 2010). The current study will utilize a couple dataset to contribute to the alliance literature.

With the conceptualization of the dynamic nature of multiple alliances in couple and family therapy, the pathways from alliance to outcome are increasingly difficult to quantify (Celano, Smith, & Kaslow, 2010). Horvath, Symonds and Tapia (2010) observed that in heterosexual couple therapy, there is an immediate sex imbalance and clients respond to this imbalance in many ways. The individuals are influenced by how they perceive their alliance with the therapist as well as how they perceive their partner's alliance with the therapist. Due to the tangled web of alliance in couple therapy and the relationship with outcome, Garfield (2004) suggested that sex (both client and therapist) should be included in future research to aid in the understanding of its function- as it has been found to play a pivotal role. Multiple studies have found that male's evaluation of alliance (Bourgeois, Sabourin & Wright, 1990; Brown, 1998). Symonds & Horvath, 2004, found that successful therapy was a product of a stronger

male alliance as compared to their female counterparts. Conversely, Quinn, Dotson & Jordan, 1997 reported that the female report of a strong alliance was significantly related to successful therapy. Without a consensus on the directionality of which sex partner's alliance has the greatest impact on outcomes of couple therapy, the need for further investigation remains. Therapist sex has been included in discussions to explicate various findings (Anderson & Johnson, 2010; Mahaffey & Granello, 2007), but without evidence of the role therapist sex, additional studies are necessary.

Considering that the relationship between alliance and outcome is related, it is proposed that sex dynamics in alliance ratings within couple's therapy is related to outcome. In an effort to better ascertain trends of sex differences in alliance rating, between and within-systems alliance will be explored, with specific consideration of therapist sex.

Review of Literature

The connection between alliance and outcome is well documented in the therapeutic research literature. This review will include the earliest definitions of the therapeutic alliance and illustrate the development into the modern formulation of the alliance. An extensive review of the relationship between alliance and outcome will follow, profiling individual therapy briefly but maintaining a primary focus on the alliance and outcome research in couple and family therapy. Next, gender and sex in relation to therapeutic alliance is reviewed, highlighting the impact of the interaction between multiple people in the therapy room as a result of couple therapy. Research revealing therapist factors, particularly sex, and the impact of balanced and imbalanced therapeutic alliance on outcomes will be presented. Finally, research questions and hypotheses pertaining to this study are offered.

Therapeutic Alliance

Freud (1912) depicted an early version of the therapeutic alliance as the transference of the client's neurosis and attachment toward the therapist, and labeled the positive affection toward the therapist a mechanism of change. Psychoanalytic theory also viewed the relationship between the analyst and the rational ego of the patient as vital in the change process (Sterba, 1934). Continuing in the psychoanalytic tradition, Greenson (1967) coined the term working alliance to describe the relationship as vital to establishing positive collaboration for successful therapy. Johnson and Wright (2002) illuminated the differences between transference and alliance, citing that although there are similarities, the alliance is based on the here and now relationship and involves components that are different from the psychoanalytic term.

Researchers and clinicians have offered varying definitions of alliance over time. Bordin (1979) proposed that the working alliance is the relationship between the change seeker (client)

and change provider (therapist), and is a key aspect of the change process. Although definitions of alliance vary across researchers, Bordin (1979) purports four propositions to clarify the position of the working alliance studied across theoretical frameworks. Across genres of psychotherapy, there is an embedded alliance that can be manipulated to service the goal of each therapeutic theory. Second, the effectiveness of therapy is a function of the strength of the alliance. Third, the responsibility and demand of change can either rest more heavily on therapist or client dictated by type of psychotherapy. Lastly, the strength of the alliance must be examined through the lens of therapist and client characteristics as well as closeness of fit. In this sense, the working alliance can be conceptualized by many theorists, bear comparison and generalize to alliance research across modalities.

Bordin (1979) suggested that three aspects of alliance create the dynamic nature, defining alliance in terms of clearly defined goals created through collaboration, clearly defined tasks with concrete support, and an emotional bond based on mutual respect and positive regard. Most theoretical constructs of alliance agree that these proposed goals, tasks and bonds are themes constant in alliance definitions (Bordin, 1979; Gaston, 1990; Horvath & Symonds, 1991). Bordin's suggestion of the goals, tasks, and bonds of alliance has been the foundation of much of the alliance research in individual therapy (Horvath & Symonds, 1991) but as Johnson and Wright (2002) purport, the goals, tasks and bonds multiply these dynamics in couple and family therapy due to additional people involved. Later in this review, family and couple alliance methods are described in greater detail. Many researchers agree that the collaborative elements of therapy between therapist and client in addition to a negotiated deliberate relationship and the agreement of "breadth and depth" (Horvath & Symonds, 1991, p. 139) are central and consistent themes in alliance (Bordin, 1979; Horvath & Greenburg, 1989; Luborsky, 1976). With careful

review of the literature, it is clear that alliance is a salient and valid construct within therapeutic research.

Therapeutic Alliance and Therapy Outcomes

Interest in the mechanism of therapeutic alliance effect on the process and outcomes of therapy is widely studied in individual therapy, and more recently systemic therapy. Modern interest in alliance continues to increase due to the consistent findings that researchers find a significant correlation between alliance and outcome that cut across therapeutic orientations and modalities (Lambert & Bergin, 1994; Stiles, Shapiro & Elliot, 1986). Considering alliance as a "common factor" in successful treatment, researchers have suggested that alliance may play a more pivotal role than treatment modality and specific interventions (Safran & Muran, 1996; Sprenkle & Blow, 2004). The therapeutic alliance remains one of the most widely researched mechanisms of change in the therapeutic process (Castonguay & Beutler, 2006; Martin, Garske, & Davis, 2000). The relationship between therapist and client is one of the oldest themes in outcome research (Horvath & Symonds, 1991).

The scores of studies finding a strong relationship between therapeutic alliance and therapeutic outcomes created opportunity for meta-analytic procedures to be applied (Crits-Christoph & Connolly, 1999; Fluckiger, Del Re, Wampold, Symonds, & Horvath, 2012; Horvath & Symonds, 1991; Martin, Garske & Davis, 2000). Twenty-four studies based on 20 distinct datasets, sampled from 1980 to 1991 were available for meta-analytic procedures in the first meta-analysis to investigate the quality of the alliance relating to therapeutic outcomes (Horvath & Symonds, 1991). Articles were sampled from a literature search of four databases; PsychInfo, MedLine, Dissertation Abstracts and the Educational Resources Information Center (ERIC), in addition to a cross-tabulation of found articles and a manual search of journals from the twelve months prior to the commencement of their study. Inclusion criteria included a measure of a working, helping, or therapeutic alliance, a quantifiable relationship between alliance and outcome, clinical research, five client minimum, and research limited to individual treatment. Effect sizes were created by first converting all r values into Fisher's Z equivalents to control for the bias of the r distribution. After statistical computations, the Z values were reconverted into rs values. Effect sizes were reported in unweighted values, although weighted values were reported if significantly different conclusions could be drawn from the values.

Horvath and Symonds (1991) concluded from the overall effect size (.26) that therapeutic alliance was moderately related to therapeutic outcomes in individual therapy. The authors reported that although the ES appears nominal, it is within the range of values reported by many psychotherapy variables, and that the reported effect size may be conservative based on inclusion of all relations, where even those that were non-significant were set to zero. Further conclusions revealed that the relationship between the quality of alliance and outcome were consistent after controlling for other variables and their possible effects on the relationship. Horvath and Symonds (1991) noted that client ratings of alliance correlated higher with therapeutic outcomes than therapist's ratings of alliance, indicating that the client's perceptions of the relationship play a critical role.

Intending to identify and further understand relations between alliance and outcome in individual therapy, Martin, Garske and Davis (2000) conducted a meta-analysis of 79 studies (58 published, 21 unpublished). Utilizing the same inclusion criteria as used by Horvath and Symonds (1991), this study selected articles covering an 18-year span. Although client information variables existed in the meta-analysis many studies did not separate male and female clients, and therefore the relationship between sex and the effect on the alliance and outcome

were not addressed. Martin et al. (2000) found that alliance was moderately related to outcome (*r* = .22), consistent with previous meta-analytic findings (Horvath & Symonds, 1991). Building upon Horvath and Symonds (1991), Martin et al (2000) found on average when the quality of the alliance was high, outcomes were more positive, and vice versa. That finding supports the hypothesis that alliance may be therapeutic in and of itself (Henry & Strupp, 1994), and if clients perceive a positive alliance they will also perceive the relationship as therapeutic regardless of therapeutic modality or intervention. Finally, clients maintain a stable view of alliance over time, more so than therapists, and, if the interaction of alliance begins positive, it is likely to end positively.

Apart from meta-analytic procedures, other researchers pursued the casual relationship between alliance and outcome in individual therapy. Barber, Connolly, Crits-Christoph, Gladis and Siqueland (2000) examined alliance, outcome, and early in-treatment symptom improvement in depression symptoms; hypothesizing that alliance strength would predict early depression symptom improvement. Eighty-eight clients (46 women and 42 men) who met primary diagnostic criteria for chronic depression, avoidant or obsessive-compulsive personality disorder and who completed the appropriate measures of alliance and depression at week 2 and 5 were included in the study. Although process variables, such as therapeutic alliance, are difficult to investigate in relation to causality, the authors address the three conditions of a causal claim; nonspuriousness, covariation between alliance and outcome measure and temporal precedence of the alliance (Feeley, DeRubeis, & Gelfand, 1999). In order to make stronger causal statements, change in depression symptoms after alliance measurement and the role of early symptom improvement impact on later outcome were assessed.

Throughout treatment (ranging from 16 and 52 sessions), clients were assessed for

depression symptoms using the Beck Depression Inventory (BDI; Beck, Epstein, Brown & Steer, 1988) and strength of the alliance using the California Psychotherapy Alliance Scale (CALPAS; Hatcher & Barends, 1996). BDI scores were collected at intake as well as at weeks 2, 5, 10, in addition to month 4, and termination while CALPAS was assessed at weeks 2, 5, 10. CALPAS scores at each week significantly predicted decreased depression symptoms while controlling for earlier levels of depression symptoms. Findings suggested alliance was a robust predictor of change in depression.

Studies in individual therapy reveal a relationship between the development of client-therapist relationship, sex and the impact on outcome. Atkinson, Worthington, Dana and Good (1991) identify client etiology beliefs and client preferences in relationship to early differences in counselor effectiveness, including preconceived client ideals concerning gender and shared beliefs. Initially, beliefs about counselor's gender-assigned characteristics and beliefs may impact counselor effectiveness, but the perception dissipates across time. Deering and Gannon (2005) posit that during the initial stages of therapy, the impact of gender inequity or homogeny is evident, especially for men identified as "traditional". Similar to Atkinson et al., Deering and Gannon find that initial reaction to therapist gender may not have lasting effects if a positive alliance is developed early in the therapeutic relationship.

In conclusion, the association between individual therapeutic alliance and outcomes are well documented and robust. Few studies have investigated therapist factors, including sex and its impact on individual therapy client outcomes. Although few studies find robust associations between therapist sex and alliance in individual therapy, it is widely believed to impact the therapeutic relationship (Atkinson et al., 1991; Deering & Gannon, 1995).

Therapeutic Alliance and Therapy Outcomes in Couples Therapy

Evidenced by the extant literature linking therapeutic alliance and therapeutic outcome, the positive relationship between the bonds, goals and tasks required of alliance effect the outcomes of therapy in individual therapy is well documented (Bordin, 1979; Fluckiger, Del Re, Wampold, Symonds, & Horvath, 2012; Horvath & Symonds, 1991). Pinsof and Catherall (1986) were among the first researchers to consider the complex nature of the alliance with multiple persons engaged in the therapeutic relationship, opening the door for theorists and researchers to investigate the process of alliance formation in couple and family therapy. Pinsof and Catherall (1986) conceptualized an alliance assessment designed for use in couple and family therapy. The Couple Alliance Scale (CTAS) purported that underlying dynamics between the therapist and couple (or family) is dynamic; and a "saturated" model in which the alliances between client and therapist and "client-as-a-couple" are the most appropriate measure of alliance in systemic therapy. The couple is defined as a unit distinct from the individuals (Horvath, Symonds & Tapia, 2010; Pinsof & Catherall, 1986). Horvath, Symonds and Tapia (2010) noted that the "client-as-a-couple" is a systemic concept that has been used as a way of underscoring the idea that the couple is more than the sum of its individual parts. The couple is distinct from each individual, functions as a unit and has relationships with others as a "we" in important and meaningful ways-legally, socially and emotionally. Although there are many facets in evaluating alliance in couple therapy, unfortunately the research indicates that the outcomes for individual change and couple functioning are not highly correlated and do not respond similarly to treatment (Knobloch-Fedders, Pinsof & Mann, 2007; Shadish & Montgomery, 1993).

Considering the challenges faced both clinically and in the literature, Symonds and Horvath (2004) ventured to further the understanding of the complex relations between alliance

and outcomes in couple therapy. The researchers completed their study with 44 couples who met the inclusion criteria, including cohabitation for at least one year (although marriage was not a pre-requisite), had received previous treatment for their presenting problem, or who exhibited any form of psychopathology within the previous 6 months. Couples were treated in a university setting or at the offices of a large private practice and were distributed equally among the two settings. The average female age was 39 years old and men on average were 41 (ages ranged from 23 to 69). All but one client was identified as Caucasian. Approximately 27% of families were remarried and included children from previous marriages, with a mean of 2.16 children per family, although 5 couples were childless and 6 of the couples no longer had children in the home. Six therapists were recruited with varying experience from two to twenty years of clinical experience, which engaged clients in a variety of therapeutic modalities for six weeks of 50 minute therapy sessions.

Therapeutic alliance and outcomes were assessed throughout treatment. Outcomes were measured with the Marital Satisfaction Scale (Roach, Frazier & Bowden, 1981) at intake, termination and 4 to 6 weeks after treatment. Therapeutic alliance was evaluated by each client and the therapist using the Working Alliance Inventory (WAI-Co; Symonds, 1999) after session 1 and session 3. Findings indicated that therapist rating of alliance was more predictive of outcome, although therapists rated alliance lower than couple's ratings. The loyalty dimension or allegiance between partners was found to employ another dynamic in the equation of alliance in couple therapy. The degree of trust, sense of security and connection between the individuals in the couple is suggested by Symonds and Horvath (2004) to be an important factor in alliance formation that affects the success of therapeutic outcomes.

The loyalty dimension, or allegiance discussed by Symonds and Horvath (2004) was elaborated upon with findings published by Bedi and Horvath (2004). The purpose of the study was to determine the association between perceived strength of the couple's alliance (similar to Pinsof's within-system alliance, but did not utilize the CTAS for measurement) and therapeutic outcomes. The perceived strength of alliance was categorized into three classifications, the balanced alliance, the positively biased/blessed alliance, and the negatively biased/biased alliance. Researchers assessed therapeutic alliance of 47 couples with the Alliance Inventory for Couples (AI-Co; Symonds, 1999) that is premised upon Bordin's (1979) three components of alliance (tasks, goals, and bonds). The Family Environment Scale (FES; Moos & Moos, 1986) and the Marital Satisfaction Scale (MSS; Roach, Frazier & Bowden, 1981) were utilized to assess couple therapeutic outcome.

Findings from the Bedi and Horvath (2004) study revealed that the results did not confirm a linkage between perceived strength of couple alliance and outcome, and there were no statistically significant associations between couples with reported balanced, blessed, or biased alliances and outcome. With the hypotheses unconfirmed, the authors discussion of future directions offers suggestions to continue to pursue these complex structures in couples alliance formation and impact on outcome, and to not discount the potential links although these formulations of couple perceived alliance strength did not yield forecasted results.

With a distinguished link established between alliance and outcome in psychotherapy, researchers began to explore mediators and moderators of this relationship (Horvath & Bedi, 2002). Knobloch-Fedders, Pinsof and Mann (2004) tested a number of factors to examine predictive validity of client variables, including psychological symptomatology, marital

adjustment and early attachment experience. Focusing on the client factors in alliance formation of couples, researchers collected alliance data from clients only.

At a large Midwestern outpatient clinic, 35 couples and 10 additional clients (partner data were missing or incomplete) were recruited to engage in integrative problem-centered therapy (IPCT; Pinsof, 1995) with 28 therapists (25 women, 3 men). The mean therapists' clinical experience was 3 years. Treatment was not time limited, and therefore therapy duration ranged from 8 to 44 sessions, with an average of 18.26 sessions. Participants ranged in age from 21 to 74, with the mean age at intake 34. Seventy-seven percent of the sample were Caucasian, 6% Hispanic, 3% Asian, 3% African American, and the remaining 10% did not indicate a race or were biracial. Median household income was \$50,000.

Client factors and specific outcomes were measured through assessments at pre-treatment (COMPASS, MSI-R, and the FOO FAD), and alliance was evaluated with the CTAS-R after sessions 1 and 8. The COMPASS Treatment Assessment System (Howard, Brill, Lueger, O'Mahoney, & Grissom, 1995) measured individual outcome, patient characteristics and response to therapy with 68-items on a 5-point Likert scale questionnaire. The three subscales are current well-being, current symptoms, and current life functioning. The Marital Satisfaction Inventory-Revised (MSI-R; Snyder, 1997) is a 150-item self-report measure of relationship distress, with dimensions including affective communication, problem-solving communication, aggression, time together, and sexual dissatisfaction. Family Assessment Device-family of origin (FOO FAD; Epstein, Baldwin, & Bishop, 1983) measured current family functioning on a 60-item self report measure, and included subscales in problem solving, communication, role, and affection involvement. Lastly, the Couple Therapeutic Alliance Scale-Revised (CTAS-R; Pinsof, 1994) was implemented to measure the therapeutic alliance in conjoint treatment. On a 5-point

Likert scale, 40-items assessed by each partner individually measured three components of alliance identified by Bordin (1979) (tasks, goals and bonds) for each alliance subsystem (self-therapist, partner-therapist, couple-therapist, and self-partner).

Knobloch-Fedders et al. (2004) reported several important findings in this study. Couples who terminated treatment before session 8 had a lower initial couples' alliance at session 1 than those who remained in treatment through session 8, indicating the importance of establishing a strong initial alliance. Results indicated that individual symptomatology is not a useful predictor of the formation of alliance in couple's therapy, but is significantly related to relational distress. At session 8, men who reported more marital distress at intake assessed poorer alliance with the therapist and allegiance with their partner, however this correlation was not found for women. Sexual dissatisfaction was the only marital distress variable that at intake predicted alliance for women at session 1 and 8. Previous research (Johnson & Talitman, 1997) found mixed results concerning marital distress as a predictor of split alliance. Knobloch-Fedders et al. (2004) found that marital distress predicted a split alliance at session 8 for women, defined as a difference of at least one or more standard deviations between CTAS subscale scores for men and women. The authors noted that the results suggested that sex may mediate the process of alliance formation in couple therapy and highlight the importance of establishing a strong alliance with both partners early in therapy.

Knobloch-Fedders, Pinsof and Mann (2007) followed up their previous work with an investigation of the formation of the alliance in couple therapy over time. The researchers posited that individual and relationship variables contribute to alliance formation in the early and middle phases of couple therapy. The same data, participants, methods, and measures from Knobloch-Fedders et al. (2004) were used. Results indicated that alliance accounted for 5-22%

of the variance in improvement in marital distress, although alliance did not predict progress in individual variables. Despite findings reported in Knobloch-Fedders et al. (2004) that alliance formed early in treatment, the authors elaborated on alliance formation over time and found that although alliance does appear stable over time, female alliance score fluctuations are attributed to treatment responsiveness. More specifically, female scores for the "within" subscale on the CTAS is a strong predictor of positive couple change at session 8 and that female's initial positive perception of their relationship with the therapist is a positive predictor of change over time. While researchers have more recently begun to explore mediators and moderators of the relationship between therapeutic alliance and outcomes in couple therapy, findings indicate that increased exploration of subsystem alliance can be a useful predictor and indicator of client change.

In a more recent study, Anker, Owen, Duncan and Sparks (2010) investigated the relationship between alliance and outcome, with a focus on determining whether alliance predicted outcomes beyond early change. Noting that sex considerations have revealed important findings but that results are mixed (Bourgeois et al., 1990; Knobloch-Fedders et al, 2007; Symonds & Horvath 2004), the authors also sought to identify patterns of partner influence and biological sex on alliance and outcomes. Studies in individual psychotherapy have identified various patterns in alliance development, including linear, quadratic, and brief "V" shaped (Kivlighan & Shaughnessy, 2000; Stiles et al., 2004). No patterns have been identified in couple therapy beyond the split alliance (Pinsof & Catherall, 1986; Symonds & Horvath, 2004). Therefore, Anker et al. (2010) recruited 250 couples from a Norwegian family counseling agency to engage in treatment and to test their hypotheses. A sub-sample of clients who attended four or more couple sessions were used to examine alliance scores as a predictor of outcomes of

early changes and later change. The sub-sample consisted of 118 couples and 19 therapists, and used the assessment measures at different session time points than the total sample.

In the sample, couples were white, Euro-Scandinavian and heterosexual. The mean age was 38 and relationship duration on average was nearly 12 years. Twenty therapists were used and their caseloads ranged from 4 to 27 couples. The Outcome Rating Scale (ORS; Miller & Duncan, 2004) assessed psychological functioning prior to each session, although data procured was only used in analyses at pre-treatment, post-treatment and follow up in the total sample, and at pretreatment, Session 3 and post-treatment in the sub-sample. The Locke Wallace Marital Adjustment Test (LW; Locke & Wallace, 1959) was used to glean self-reported marital satisfaction data at pre-treatment and at 6 month follow up. Session Rating Scale (SRS; Duncan et al., 2003) measured the client's rated alliance with the therapist at each session, but data were used from the first and last session in the sample population while the SRS was used in the first, third, and last session for the sub-sample.

An Actor-Partner Interaction Analytic Model (APIM; Kashy & Kenny, 2000; Kivlighan, 2007) was used to model the mutual relationship between individuals. Unlike previous studies where sex was assessed separately for men and women, this model enables researchers to account for the interdependence between partner scores.

Anker et al. (2010) tested their first hypothesis in the full sample and reported that couples with higher ratings of alliance at the end of therapy were related to improved therapeutic outcomes. Further, outcomes were better for clients when their spouse had higher alliance scores with the therapist at termination, specifically male alliance at last session was a stronger predictor of outcomes than female. Also, only male alliance was a significant predictor of outcome on the ORS at 6-month follow up. In the sub-sample of couples that attended therapy

for 4 or more sessions, it was found that first session alliance was not predictive of outcomes, but third and last session alliance predicted outcome beyond early change. In regard to patterns in couple alliance formation, Anker et al. (2010) noted that couples that began therapy with a high alliance score that increased across time had a significant advantage in outcomes over other couple rating patterns. However, the role of therapist sex was not considered in sex interactions.

Anker et al. (2010) and other researchers that provide findings that establish patterns in partner alliance scoring and outcomes often utilize Pinsof and Catherall (1986) Revised Integrative Psychotherapy Alliance Model (IPAr) which encompassed Bordin's (1979) alliance theory which identified tasks, goals, and bonds and an interpersonal system domain (Pinsof, Zinbarg, & Knobloch-Fedders, 2008). Horvath's (1982) widely used Working Alliance Inventory (WAI) is used to measure alliance in individual therapy underpinned by Bordin's three dimensions of alliance. The interpersonal systems domain includes a four dimensions, Self-Therapist, Other-therapist, Group-therapist, and Within-system ratings (Pinsof et al., 2008). Selftherapist is defined as the alliance ratings between the client rater and the therapist ("the therapist and me"). Other-therapist is the rater's perception of the alliance between their partner and the therapist ("the therapist and my partner"). Group-therapist is a focused rating on the therapist and the clients in session ("the therapist and us"). Within-system rating is the rater's perception of the alliance between the couple ("my partner and I"). Anderson and Johnson (2010) collapsed the alliance ratings Self-Therapist, Other-Therapist and Group-Therapist and defined the between system alliance, while the Within-system alliance remained. These groups were differentiated to assess the dynamics between the therapist and clients, and the couple's alliance. In a conceptualized model of Bordin's (1979) alliance dimensions and the interpersonal system domains, Pinsof and Catherall (1986) developed three self-report instruments; the Individual

Therapy Alliance Scale (ITAS), the Couple Therapy Alliance Scale (CTAS), and the Family Therapy Alliance Scale (FTAS).

Friedlander, Escudero, Heatherington and Diamond (2011) utilized meta-analytic procedures to aggregate 24 published couple and family therapy alliance and outcome studies and reviewed the current status of alliance in couple and family therapy in the literature. Inclusion criteria required articles that measured couple and family therapy alliance, that are selfreport and/or observed, and were used to relate outcomes at mid-treatment or final, or treatment retention. Electronic search engines, including PsychInfo, PubMed, and Social Sciences Citation Index, in addition to cross-referencing articles were used to find articles for the meta-analysis. Studies that used non-validated measures of alliance, unpublished dissertations and non-English studies were not included. The total number of clients in the 24 studies is 1,461. Seven studies are couple therapy (two of those were conducted in groups) and seventeen studies are family therapy (a least a portion of therapy occurred conjointly). Treatment typically lasted fewer than twenty sessions. Sixty-five percent report utilizing manualized treatment although various therapeutic modalities were reported (including cognitive-behavioral therapy, functional family therapy, emotion-focused therapy and psycho-educational family therapy).

Fifty percent of studies utilized observation alliance ratings (primarily the System for Observing Family Therapy Alliance-observer (SOFTA-o; Freidlander, Escudero, & Heatherington, 2006) and the Vanderbilt Therapeutic Alliance Scale – Revised (VTAS; Diamond et al., 2006) while the WAI and CTAS/FTAS were the most often used self-report measures. Five of the twenty-four studies examined the association between alliance and treatment retention, and therefore no outcome measure was used.

Meta-analytic procedures commenced by the authors, but the complex nature of the structure of alliance measures required a multi-level model in which a meta-analytic statistic was calculated for each study in order to maintain the statistical assumption of independence. Effect sizes were calculated from aggregate correlations reported from each study. Correlation coefficients were computed based on Hunter and Schmidt's (1990) random effects approach. For studies in which statistics other than correlation coefficients were reported, these were calculated and converted to an *r* statistic. The weighted average effect size was reported as r = .26, z = 8.13 (p<.001) and a confidence interval of 95% between .33 and .20. These findings indicate a statistically significant association between alliance and outcome, which accounted for a substantial proportion of variance among couple and family therapy retention and/or outcome. Friedlander et al. (2011) noted that the effect size reported in their results compares to the effect size r = .28 in the meta-analysis of alliance and outcome in individual therapy by Horvath and Symonds (1991).

Mediators and moderators used in alliance studies in couple/family therapy were not possible to test in the meta-analysis due to the small number of studies that directly tested these associations. In couple therapy, biological sex was thought to be linked to therapy outcomes. Authors speculated that sex differences found in couple studies may be linked to the "greater reluctance of men to engage in treatment, as well as their relative power in some couples (especially when there is abuse), and women's relatively higher commitment and "ability to work toward positive outcomes regardless of the relative strength of their relationship with the therapist" (Symonds & Horvath, 2004, p. 453).

Finally, meta-analysis reports limitations of the current body of literature of alliance in couple and family therapy. The limitations include variations of alliance measures and

assessment timings, limited sample sizes and lack of studies utilizing moderation or mediation. Few studies have examined individual characteristics, including attachment style that may reveal associations with alliance based on the importance of forming close, trusting, and cohesive bonds with others.

Johnson and Wright (2002) identified the structural complexities of assessing and measuring alliance in family therapy due to the multiple subsystems that may exist beyond the subsystems in couple therapy. The authors revisit Bordin's (1979) theory of alliance consisting of tasks, goals, and bonds, and thoughtfully consider application of these concepts into family therapy. The author's suggestions highlight that the current theories used to conceptualize family therapy alliance are not easily operationalized and that process studies to identify the development of alliance over time are lacking. In addition, they state that ethnicity and sex influence on the alliance is determined to be a "necessary question" to understand the formulation of alliance. Numerous theoretical and clinical questions exist in the literature concerning the organization and structure of alliance development for both couple and family therapy. It is important to consider both couple and family alliance together as this may contribute to an increased understanding in the literature.

Anderson and Johnson (2010) provided evidence that the actor-partner interdependence model (APIM) could be utilized successfully to assess relations between therapeutic alliance and outcome, specifically symptom distress in couple therapy. Instead of analyzing partners separately by sex, the APIM allows for the couple to be considered as a unit to assess actor and partner effects. Actor effects are the relationships between a partner's own characteristics and their outcomes, while partner effects are the relationships between a partner's own characteristics and the dependent variable of their partner (the influence each partner has on one another) (Cook

& Snyder, 2005; Anderson & Johnson, 2010). The authors noted that although these types of models are available, valid, and useful for assessing couple variables, researchers are slow to adopt new methodology.

Anderson and Johnson (2010) discovered that actor effects of alliance on distress are associated in the fourth session of therapy for both male and female partners. Clearly, increased alliance in each couple unit is associated with increased relational satisfaction. The controls in this study, utilizing the APIM provide the most concrete evidence that there are actor effects on alliance when related to relational distress for males and females. In addition, support was found for partner effects of alliance on distress. Specifically, as male's alliance with the therapist increased, so did female's individual distress. Also, as male's alliance with his partner increased, his partner's individual distress decreased. Anderson and Johnson posit that these findings may reflect a split alliance, in which a strong male-therapist alliance at the expense of his wife would increase her distress. Sex speculations can be made concerning therapist characteristics such as age and sex (young, female therapist) which may be helpful to explicating these findings, but those linkages were not tested because therapist variables were not linked to this dataset.

Findings also revealed that the between-system alliance and within-system alliance are important in ameliorating distress, particularly higher reported within-system alliance is associated with relational distress and between-system alliance is associated with individual psychological distress. Considering the important initial findings using APIM to investigate male and female alliance and distress, the current study and hypotheses presented will address some of the limitations considered in the discussion, including the role of therapist sex.

Therapeutic Alliance and Sex Differences

Castonguay, Constantino, and Holtforth (2006) note that alliance is a frequently studied process of change, but there is a lack of focus on client and therapist populations, not limited to race, sex, and culturally-specific variables. Evidence clearly presents that the complex structures between couples, families, and the therapist are associated with the development and formation of therapeutic alliance, which in turn is strongly related to therapeutic outcomes. Recent studies have examined sex differences in alliance formation and found important evidence for a sexbased argument and can provide clinical application guidelines to engage with a couple in therapy. Although these studies exist, there is no literature that incorporates therapist sex with couple alliance ratings using the APIM to address bi-directional influences present in a systemic model. I will address the existing literature as a basis for exploration of therapist sex's possible importance to alliance research.

Horvath, Symonds and Tapia (2010) described alliance within systemic therapies as a web of complex relationships that exist between an individual and therapist, but also incoming influences due to perceptions of their partner's alliance with the therapist. Rait (2000) suggested that not only are individual's influenced by dyadic alliances; the client-as-a-couple unit is a distinct "we-ness" that interacts differently than the sum of its parts. Although separate analyses for males and females offer informative and interesting results that are reviewed below, they do not necessarily lend to the larger link between alliance and outcomes in couple therapy (Horvath et al., 2010).

Horvath et al. (2010) explain that in heterosexual couple therapy, there is an immediate sex imbalance and how men and women respond to these imbalances can impact alliance and in turn, affect therapeutic outcomes. In an article by Hammarström and Phillips (2012), perceived

sex inequity in couple relationships among a Swedish sample was related to depressive mood, drawing attention to sex relations as a social determinant of depression and other outcomes.

Bourgeois, Sabourin and Wright (1990) completed a study in which the relationship between marital distress, alliance formation and outcomes in a group marital skills training program was examined. Sixty-three couples who attended 9 weekly, 3 hour group sessions assessed themselves using the Dyadic Adjustment Scale (DAS; Spanier, 1976), the Potential Problem Checklist (PPCL; Patterson, 1976), the Marital Happiness Scale (MHS; Azrin, Naster, & Jones, 1973), and the Problem Solving Inventory (PSI; Heppner & Peterson, 1982). The alliance scales, the CTAS and the Therapist Alliance Scale (TAS; adapted from Pinsof & Catherall, 1986; Bordin, 1979) were utilized to measure perceived alliance. Findings reveal that the male alliance score is a more powerful predictor of outcomes, specifically in treatment success. Although male alliance is the better predictor of therapeutic success, level of alliance formation is neither impaired nor facilitated by reported level of marital distress. The authors do not speculate on the sex findings, because they were unaware of reported sex findings in the literature.

Similar findings were found by Brown and O'Leary (2000) who conducted group treatment of violent couples. The strength of male's initial alliance predicted outcomes, defined as decreased mild and severe psychological and physical aggression, while the strength of female's alliance was unrelated to treatment outcomes. However, Quinn, Dotson and Jordan (2010) found that in a sample of 17 couples that received marital or family therapy across 9 therapists, that the association between alliance and outcome were stronger for females than males. Quinn et al. (2010) also reported that the outcome of therapy was more positive when female alliance scores were higher than their male partner's alliance ratings, specifically on the

CTAS subscale "task" and "other". Results produced by Quinn et al. (2010) have not been consistently found throughout the literature.

In sum, the literature more often reports that male alliance scores are more associated with positive outcomes in couple therapy (Bourgeois et al., 1990; Brown & O'Leary, 2000; Garfield, 2004; Symonds & Horvath, 2004; Knobloch-Fedders et al., 2004; Anker et al.; 2010). Garfield suggested a theory of gender in couple alliance, purporting that "gender is one of the most important socio-cultural factors that influence the loyalty dimension of the couple's relationship because of its dominant role in shaping partner's expectations of their own and their partner's behavior" (Garfield, 2004, p. 463). Knobloch-Fedders (2004) proposed a strategy of engaging the male client to provide a strong alliance initially, while monitoring rapport with the female client in order to preserve the within-system alliance. A strong within-system alliance would create a strong couple alliance and as Anderson and Johnson (2010) find, decrease her distress.

Power within the context of relationships is an important factor to consider attempting to understand alliance formation in couple therapy. Using a gendered perspective, as stated by Garfield (2004), men carry "positional power" defined as status, and control of resources. Women carry "relational power", or the emotional work and intimacy in relationships (Blanton & Vandergriff-Avery, 2001). Therefore, power differentials place women at a greater advantage in talk therapy, especially when the area under discussion is emotions and relationships (Garfield, 2004). Although there are no peer-reviewed studies of therapist sex possible impact on alliance in couple therapy, the Garfield (2004) suggests that dependent on the genderconfiguration, the therapist should acknowledge the sex differential and affirm the other partner's sex-based point of view, which in turn should strengthen the alliance. Remarkably few

studies address the relationship between sex and therapeutic alliance (Blanton & Vandergriff-Avery, 2001; Bouregois, Sabourin & Wright, 1990). Horvath, Symonds, and Tapia (2010) warn against interpreting how sex functions in the formation of alliance in couple therapy due to the lack of empirical studies, but concur that sex likely plays in integral role in alliance formation.

Therapist Sex and Impact on Alliance in Couple Therapy

Few studies have worked toward understanding the role sex plays in couple therapeutic alliance, although many authors report a gap in the literature related to this relationship. Anderson and Johnson (2010) found a split alliance between male and female dyads in couple therapy in which the male alliance is comparatively stronger with the therapist. As the strength of his alliance with the therapist increased, so did his female partner's individual distress. The authors offered sex specific speculation to explain those linkages, but they were not empirically investigated because therapist variables were not linked in their dataset.

Blow, Sprenkle and Davis (2007) sought to answer the lingering question; how do therapist factors contribute to alliance and outcome formulations in couple therapy? Research on specific therapist contribution had been limited to observable traits, observable states, inferred traits, and inferred states (Beutler et al., 2004). These factors prescribe therapist sex as an observable trait. Throughout previous literature, these therapist factors had small effect sizes and neither mediating nor moderating variables were investigated. Additionally, studies have not utilized APIM modeling to explore the caveats and implications of complex relationships between multiple subsystems. Unfortunately, no literature existed to address their research questions.

Symonds and Horvath (2004) proposed a similar question concerning sex disparities between partners in couple therapy. One partner is the same sex as the therapist and the other

must form a bond with a person of the opposite sex. The results from the study of 44 couples transpired through a multilevel analysis due to the presence of both male and female therapists. They found that therapist sex did not have a significant effect on client ratings of alliance, except that male therapist alliance ratings on the WAI-Co were significantly higher only after the initial session. Results could not be investigated further due to limitations of the dataset and study design. Symonds and Horvath (2004) note that the sex disparities may be interesting to pursue in future alliance research in couple therapy.

Data from individual treatment and couple therapy were collected and investigated by Bartle-Haring, Knerr, Adkins, Ostrom Delaney, Ganagamma, Glebova, Grafsky, McDowell and Meyer (2012) to investigate differences in the apeutic alliance and trajectory based on case type, therapist experience, and therapist sex. Participants included 96 couples and 52 individuals, and 15 therapists procured from a large mid-western training clinic for couple and family therapy. The authors created a nested model based on guidelines proposed by DeRubeis et al. (2005) to address the trajectory of alliance; including the therapist, the client, the interaction of the therapist and client, symptom improvement, and time. Testing these trajectories revealed that therapist factors could be attributed to more variance in couple therapy than individual therapy. Therapist trust increased by female couple clients based on increased years experience (bond subscale) and therapist sex did not significantly predict variation in bonds scores. Limitations of the study include the fact that the alliance instrument used was adapted from a measure meant to assess individual alliance and was shortened to 12-items from its original 40 items (Working Alliance Inventory-Shortened Version; Tracey & Kokotovic, 1989). Bartle-Haring et al. (2012) were not able to confirm their hypothesis concerning therapist sex association with couple therapy alliance, but restated that other researchers (Thomas, Werner-Wilson, & Murphy, 2005)

conclude sex influences the alliance, but there is little agreement on how this occurs. Thomas et al. (2005) concluded that although therapist sex may influence alliance, client sex may impact the alliance as well. Following a literature review completed in 2007 by Mahaffey and Granello, the authors concluded that therapist experience and therapist sex were important areas for future research and were clearly lacking in current literature. Blow, Timm and Cox (2008) reported in a review of sex in therapeutic change that in fact no study had connected the sex of the therapist to outcomes, although it is likely that sex is a significant factor in therapeutic interactions.

Research Questions

Research Question 1: Is an individual's between and within-system alliance related to her/his own or his/her partner's individual distress levels at session 4?

Research Question 2: Is an individual's between and within-system alliance related to her/his own or his/her partner's relational satisfaction levels at session 4?

Research Question 3: Is the association between individuals' between and within-system alliance and her/his individual distress or relational satisfaction levels at session 4 moderated by the sex of the therapist?

Methods

Data for this study were collected at the Auburn University Marriage and Family Therapy Center in Auburn, Alabama. This center is an on-campus training clinic for the Commission on Accreditation for Marriage and Family Education (COAMFTE) accredited Marriage and Family Therapy Program at Auburn University, providing services to residents of east Alabama. Therapy at the center is conducted by Master's level student therapists-in-training and supervised primarily by Ph.D. level, licensed marriage and family therapists who are AAMFT approved supervisors. Data utilized in this study are part of an ongoing study at Auburn University. Many studies have been completed with this data set (e.g., Bertagnolli, 2012; Long, 2011).

Participants

Couples who presented for therapy at the Auburn University Marriage and Family Therapy Clinic (AUMFTC) from 2002 through 2011 were eligible participants for this study. The sample consists of married and non-married heterosexual couples engaging in therapy for numerous therapeutic concerns, including depression, behavior problems, infidelity, sexual issues, and many more. Specifically, 443 couples (886 individuals) minimally completed intake paperwork, while 216 couples (432 participants) completed at least fourth session paperwork, making them eligible for this study. Therefore 48.7% of couples were deemed "completers", indicating that they had completed both intake and fourth session paperwork. Between 2002 and 2011, the AUMFTC incurred a 48.7% retention rate for couples attending at least 4 sessions of therapy.

Participants included in the current study ranged from 18 to 62 years of age (M=male/female) (M=32/30). Approximately 77% of males and 73% of females identified themselves as Caucasian, and 11% of males and 19% of females identified themselves as African

American. In regard to highest level of attained education, 31.7% of males and 25.9% females report completing high school and 11.2% of males and 13.6% of females reported receiving Bachelor's degrees (See Table 1).

Table 1

| Demographics | Ν | Iales | F | emales |
|-------------------------------|------------|---------|-----|---------|
| (% male/female chose not to j | provide) N | Percent | Ν | Percent |
| Age Group (0.5%/2.8%) | | | | |
| 18-29 | 96 | 46.8% | 132 | 60.0% |
| 30-39 | 70 | 34.1% | 60 | 27.3% |
| 40-49 | 32 | 15.6% | 19 | 8.6% |
| 50 or above | 7 | 3.4% | 9 | 1.3% |
| Racial Group (9.6%/2.6 %) | | | | |
| White | 163 | 77.3% | 161 | 72.5% |
| African American | 21 | 10.6% | 41 | 18.5% |
| Hispanic/Non-White | 3 | 1.5% | 7 | 3.2% |
| Asian/Pacific Islander | 2 | 1% | 7 | 3.2% |
| Income (7.4%/7.0 %) | | | | |
| Less than 10,000 | 25 | 11.9% | 33 | 14.9% |
| \$10,001 to \$20,000 | 39 | 18.5% | 38 | 17.2% |
| \$20,001 to \$30,000 | 32 | 15.2% | 34 | 15.4% |
| \$30,001 to \$40,000 | 41 | 19.5% | 47 | 21.2% |
| Over \$40,001 | 58 | 27.5% | 54 | 24.3% |
| Education (4.3%/1.8%) | | | | |
| GED/High School | 65 | 31.7% | 57 | 25.9% |
| Vocational/Associates | 64 | 31.2% | 98 | 44.5% |
| Bachelor's Degree | 23 | 11.2% | 30 | 13.6% |
| Master's Degree | 29 | 14.1% | 24 | 10.9% |

Procedure

This study utilizes data from heterosexual couples in committed relationships that participated in couple therapy at Auburn University's Marriage and Family Therapy Center (AU MFTC) between May 2005 and December 2011. Quantitative data for this study were amassed from the Outcome Questionnaire (OQ-45.2; Lambert et al., 1996) and the Couple Alliance Scale (CTAS; Pinsof & Catherall, 1986). Assessment packets are distributed to clients at intake and at every fourth subsequent session (session 4, session 8, session 12, session 16, and so on). The packets consist of the informed consent and questionnaires measuring individual distress, relationship satisfaction, and demographic information.

Information for this study was obtained by self-report questionnaires that are administered by center administrative personnel and/or intern therapists for clinical assessment purposes, future research and administrative records. Clients were informed of the purposes of survey completion prior to beginning treatment and signed agreements to release information for clinic-sponsored research. Confidentially procedures applied to data collection and storage, as the datasets were transformed prior to data analysis.

The Outcome Questionnaire and Revised Dyadic Adjustment Scale are part of the intake packet and completed prior to the first session. The OQ-45.2 and RDAS (outcome measures) are included in subsequent follow up assessment packets, which also include the Couples Therapy Alliance Scale at each 4th session. The therapeutic approach of the Master's level intern therapists differs according to current supervising faculty.

Measures

Outcome Questionnaire 45.2. (OQ-45.2). Clients completed the OQ45.2 (Lambert et al., 1996) at intake and every subsequent fourth session of therapy in conjunction with the

assessment packet. The OQ-45.2 assesses client progress throughout therapeutic treatment on three subscales. In the 45 question measure, the subscales are symptom distress, interpersonal relations and social role. Higher scores reflect greater symptoms whereas lower scores indicate fewer symptoms. The OQ-45.2 demonstrated validity (Mueller, Lambert & Burlingame, 1998; Lambert et al., 1994). Lambert et al., (1996) reported ranges from .70-.91 and .78-.84 utilizing test retest reliability. Cronbach's alpha for the current study was .92 for males and .92 for females at intake. At session 4, Cronbach's alpha was .92 for males and .94 for females.

Revised Dyadic Adjustment Scale. (RDAS; Busby, Crane, Larson, & Christensen, 1995). The RDAS was completed at intake and each subsequent fourth session. It is a 14-item self-report measure that was revised from the original 32-item Dyadic Adjustment Scale (Spanier, 1976). The items measure relationship satisfaction, conflict, stability, degree of closeness, and shared activities. Items were rated on a Likert-type scale ranging from 0 ("always disagree") to 5 ("always agree"), with higher scores reflecting greater satisfaction. Scores range from 0 to 69. A typical cut-off score of 36 differentiated between distressed and non-distressed couples. The RDAS was found to be valid and supported with a high correlation with a similar measure, the Locke-Wallace Marital Adjustment Test (Busby et al., 1995). The RDAS has good to excellent psychometrics with internal consistency and reliability ranging from .90-.95 (Busby et al., 1995; Ward et al., 2009). At intake, Cronbach's alpha for this study was .86 for males and .87 for females At session 4, Cronbach's alpha = .88 for males and .89 for females.

Couple Therapy Alliance Scale-Revised. (CTAS-R; Pinsof, 1994). Clients completed this measure at every 4th session after intake and each subsequent fourth session. The CTAS-R is a 40-item self-report instrument designed to assess client's perception of their relationship with their therapist (alliance). The CTAS-R is a revised measure of Pinsof and Catherall's (1986)

original 29-item measure. The CTAS is comprised of 3 subscales of the therapeutic alliance: tasks (13 items), bonds (10 items) and goals (6 items). Clients rate the measure on a 7 point Likert-type scale, indicating the degree to which they agree or disagree with the statement. The ratings range from "completely disagree" (1) to "completely agree" (7). Alliance was assessed by differentiating the between-systems alliance and the within-system alliance (Anderson & Johnson, 2010; Pinsof, 1994). The between system alliance is defined as the alliance between the therapist and individuals in therapy and the within alliance is the rating of the alliance between the members of the couple. Researchers have reported the test-retest reliability to be r = .84(Pinsof & Catherall, 1986). The CTAS demonstrated validity (Bourgeois, Sabourin & Wright, 1990). Heatherton and Friedlander (1990) reported an alpha of .93 for the total score, indicating good internal consistency. Cronbach's alpha for males in this study was .97 for between alliance subscale and .91 for the within alliance subscale; for females Cronbach's alpha was .95 for the between alliance subscale and .90 for the within alliance subscale.

Plan of Analysis

Actor-Partner Interdependence Model. The research questions were assessed using the Actor-Partner Interdependence Model (APIM). The APIM allows researchers to assess the dyadic nature of research questions and to ensure, in the current study that the direct effects between alliance and outcome were examined through the context of actor and partner effects.

It is important to note that male and female individual distress and relational satisfaction at session 1 were controlled. Controlling for earlier levels of the outcome variable is referred to as controlling for the autoregressive effect. This approach helps reduce bias in parameter estimates and allows for the assessment of change in the predicted variable over time (Cole & Maxwell, 2003). The APIM was fit using Amos 21. Full information maximum likelihood

estimation was used to handle missing data (Acock, 2005). All APIMs were fully saturated and thus model fit indices are not reported.

Moderation. After assessing the direct relations between male and female alliances, both between system and within system on change in distress, interaction terms were added to assess the possible moderating role of therapist sex. Each was examined as a predictor of male and female distress. Due to power and multi-collinearity issues (Babyak, 2004) each interaction term was assessed separately (as opposed to examining all four interaction terms in the same model). Following Aiken and West (1991) recommendations, interactions were plotted at high (+1 SD) and low (-1 SD) of the predictor variables and were mean centered. Therapist sex was treated as a dichotomous variable. Preacher, Curran and Bauer's (2006) interaction utility was used to plot interactions using estimates obtained from the fitted models.

Results

The therapeutic alliance is assessed at session four, and the relationship with the Outcome Questionnaire and the Revised Dyadic Adjustment Scale is evaluated for significant relationships between intake and session four. Changes in outcomes (individual and relational) are assessed as a function of therapeutic alliance at session four for both male and female partners. The interaction between sex of the therapist, alliance ratings and outcomes are assed for moderation effects. Additionally, concise alliance pathways are assessed for significance within the context of outcomes and sex.

Preliminary Analysis

Means and standard deviations were assessed for all continuous variables and are reported in Table 2. At intake and session 4, mean RDAS scores in the sample were not at clinically distressed levels (clinical distressed cutoff below 36). Means indicate that relational satisfaction (RDAS) improved over the course of four therapy sessions and individual distress (OQ) decreased for males and females. Mean alliance scores increased from intake to session 4. Data trimming was used to handle outliers. Regarding outliers, one data point was recoded for male between alliance (n=1) and three were recoded for female between alliance (n=3). To reduce outlier effects, values that exceeded 4 SDs amongst study variables were recoded as the highest observed value below 4 SDs (Cousineau & Chartier, 2010). Further, to assess for regular distribution of variables, skewness statistic and visual inspection of histograms were examined. Data were normally distributed and no variables were corrected for skewness.

Table 2

| Variable | Ν | Mean | SD | а |
|----------|---------|-------------|-----------|---------|
| RDAST1 | 199/214 | 42/39 | 9/10.5 | .86/.87 |
| DAST4 | 211/222 | 43.3/40.2 | 10.2/10.5 | .88/.89 |
| DQT1 | 202/217 | 30.6/38.3 | 13.4/15.7 | .92/.92 |
| QT4 | 212/219 | 28.7/36 | 13.3/16.4 | .92/.94 |
| AT4 | 204/213 | 157.5/159.3 | 30.5/29.1 | .97/.95 |
| WAT4 | 204/213 | 57.5/56.3 | 12.9/13.2 | .91/.90 |

Sample Descriptive Statistics of Main Construct Variables

Note. Male Partners/Female Partners. RDAST1 (Ratings of relationship satisfaction at time 1). OQT1 (Rating of individual distress at time 1). BA (Between Alliance rating at time 4). WA (Within Alliance rating at time 4).

Non-completers and Completers

Completers are defined as couples that completed intake assessments and fourth session paperwork while non-completers are couples who did not complete fourth session paperwork. Attrition was examined, because non-completers may be different from those couples that completed paperwork, and therefore become a threat to this study's validity. To test for differences among non-completers and completers, independent t-tests and chi-square analyses were conducted across demographic variables such as race, education, income, marital status, and symptom distress.

Mean comparison analyses including independent sample *t*-tests and chi-square tests indicated significant differences between completers and non-completers. Males who did not participate in follow-up paperwork (session 4) reported higher levels of individual distress (OQ) at the initial visit, t(421)=2.19, p<.05. Females who did not participate in follow-up paperwork reported lower levels of relationship satisfaction (RDAS) t(415)=-2.53, p<.05, and were less educated t(426)=-.40, p<.05 (See Table 3). No other differences were found.

Table 3

| | Male | S | | Females |
|----------------|-----------------------|-----------------|-----------------------|-----------------|
| | <i>t</i> -score X^2 | Sig. (2-tailed) | <i>t</i> -score X^2 | Sig. (2-tailed) |
| Age | -0.35 | .97 | 14 | .87 |
| Race | .71 | .40 | 1.47 | .22 |
| Education | -1.32 | .19 | -2.17 | .03 |
| Income | 43 | .67 | -1.83 | .07 |
| Marital Status | .69 | .41 | .09 | .76 |
| RDAS (Intake) | -1.83 | .07 | -2.42 | .02 |
| OQ (Intake) | 2.19 | .03 | 29 | .77 |

Comparison of Means for Non-Completers and Completers (N=443/432)

Correlational Analyses

Prior to fitting the actor-partner interdependence model to answer the research questions, correlations among study variables were examined at the bivariate level (Table 4). Analyses indicated that higher levels of male between and within alliance were related to lower levels of male and female individual distress as well as higher levels of male and female relational satisfaction. Similarly, higher levels of female between and within alliance were associated with lower levels of male and female individual distress in addition to higher levels of male and female and female individual distress in addition to higher levels of male and female and female and female individual distress in addition to higher levels of male and female and female and female individual distress in addition to higher levels of male and female and female and female individual distress in addition to higher levels of male and female individual distress in addition to higher levels of male and female and female and female relational satisfaction.

Table 4.

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. |
|----------------------------|-----|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|-----|
| 1. Therapist Sex | - | | | | | | | | | | | | |
| 2. Male OQ Session 1 | 01 | - | | | | | | | | | | | |
| 3. Male RDAS Session 1 | .04 | 36** | - | | | | | | | | | | |
| 4. Female OQ Session 1 | .04 | .27** | 2** | - | | | | | | | | | |
| 5. Female RDAS Session 1 | .01 | 24** | .59** | 37** | - | | | | | | | | |
| 6. Male Between Alliance | .08 | 29** | .17* | 13 | .15* | - | | | | | | | |
| 7. Male Within Alliance | .01 | 31** | .29** | 19** | .25** | .85** | - | | | | | | |
| 8. Female Between Alliance | .05 | 12 | .15* | 29** | .21** | .43** | .43** | - | | | | | |
| 9. Female Within Alliance | .02 | 16* | .26** | 36** | .36** | .42** | .49** | .82** | - | | | | |
| 10. Male OQ Session 4 | 02 | .83** | 26** | .21 | 22** | 34** | 36** | 15* | 19* | - | | | |
| 11. Male RDAS Session 4 | 01 | 31** | .67** | 35** | .48** | .37** | .49** | .29** | .39** | 34** | - | | |
| 12. Female OQ Session 4 | 06 | .25** | 28** | .8** | 28** | 18* | 28** | 37** | 43** | .34** | 33** | - | |
| 13. Female RDAS Session 4 | .01 | 3** | .47** | 35** | .64** | .27** | .33** | .4** | .57** | 29** | .57** | 33** | - |

Summary of Correlations of Main Construct Variables

Note. Therapist sex was dummy coded such that 0 = female and 1 = male. OQ (Outcome Questionnaire measured at session 1 and session 4). RDAS (Revised Dyadic Adjustment Scale measures at session 1 and session 4). Between and Within Alliance (subscales from the Couples Therapy Alliance scale measured at session 4). *p < .05; **p < .01.

Research Question 1: Is an individual's between and within-system alliance related to her/his own or his/her partner's individual distress levels at session 4?

An APIM was fit to examine the relationships between therapist sex, male and female between and within alliances, and male and female individual distress (OQ) at session 4 while controlling for individual distress at session 1. As shown in Figure 1, the autoregressive effect for male individual distress was stable (B = .78, $\beta = .81$, p < .001; $\Delta R^2 = .56$). Similarly, the autoregressive effect for female individual distress was stable (B = .76, $\beta = .71$, p < .001; $\Delta R^2 =$.41). The autoregressive effect is the level of distress that an individual reported at session 1 and was strongly related to the amount of distress reported at session 4. In total, the model accounted for 73% of the variance in male individual distress at session 4 and 67% of the variance in female individual distress at session 4.

One actor effect emerged at the trend level. Female between alliance was significantly associated with her fourth session level of individual distress (B = -.07, $\beta = -.13$, p < .10; $\Delta R^2 = .02$) while controlling for all other variables in the model. Specifically, a higher level of the female's perception of the alliance between the therapist and each member of the couple was related to lower levels of her distress. No other significant direct effects were found. **Research Question 2: Is an individual's between and within-system alliance related to her/his own or his/her partner's relational satisfaction levels at session 4?**

An APIM was also fit to examine the relationships between therapist sex, male and female between and within alliances, and change in male and female relational satisfaction (RDAS) at session 4 (see Figure 2). The autoregressive effects for male (B = .61, $\beta = .55$, p < .001; $\Delta R^2 = .18$) and female (B = .48, $\beta = .44$, p < .001; $\Delta R^2 = .10$) relational satisfaction were significant. The autoregressive effect is the level of relational satisfaction that an individual

reported at session 1 and was strongly related to the relational satisfaction reported at session 4. See Figure 2. Overall, the model accounted for 59% of the variance in male relational satisfaction at session 4 and 56% of the variance in female relational satisfaction at session 4.

Two actor effects emerged in the model. Male within alliance was significantly related with his relational satisfaction at session 4 (B = .18, $\beta = .23$, p < .01; $\Delta R^2 = .03$) while controlling for all other variables in the model. Specifically, as the male's alliance between him and his partner increased, his relational satisfaction increased. Female within alliance was positively associated with her relational satisfaction at session 4 (B = .43, $\beta = .51$, p < .001; $\Delta R^2 = .07$) while controlling for all other variables in the model. As her perception of the alliance between her and her partner increased, her relational satisfaction increased at session 4.

Further, one partner effect emerged. Female within alliance was marginally associated with his fourth session level of relational satisfaction (at the trend level; B = .13, $\beta = .23$, p < .10; $\Delta R^2 = .02$) while controlling for all other variables in the model. Specifically, a trend emerged that as her perception of the alliance between the couple increased, his level of relational satisfaction increased.

Research Question 3: Is the association between individuals' between and within-system alliance and her/his individual distress or relational satisfaction levels at session 4 moderated by the sex of the therapist?

Therapist sex was examined as a moderator of relations between male and female between and within alliance and male and female individual distress at session 4. Specifically four interaction terms were assessed (male between alliance x therapist sex, male within alliance x therapist sex, female between alliance by therapist sex, female within alliance x therapist sex; interaction terms not depicted in Figure). Each of these interaction terms was added to the APIM

separately. No significant interaction effects were detected, indicating that therapist sex did not moderate relations between alliance and individual distress.

Therapist sex was examined as a moderator of relations between male and female between and within alliance and male and female relational satisfaction at session 4. The same procedure to assess moderation in relational satisfaction was used as in the previous analyses to examine interaction effects with the OQ (e.g., one interaction term was examined at a time). Supportive of partner effects, therapist sex served as a moderator of effects in the male between alliance and female RDAS relationship (B = .09, $\beta = .12$, p < .05; $\Delta R^2 = .03$). As shown in Figure 3, higher levels of male between alliance was related to greater levels of her relational satisfaction at session 4, only for couples with a male therapist. The association between male between alliance and female RDAS at session 4 was not significant for couples who had a female therapist.

Supportive of actor effects, therapist sex moderated the relationship between female within alliance and her own level of relational satisfaction at session 4 (B = -.09, β = -.13, p < .05). Based on the simple slopes, more female within alliance was related to higher levels of her relational satisfaction at session 4, regardless of therapist sex. However, despite both slopes being significant, the interaction effect was significant, indicating that both lines are significantly different from each other. One interpretation is as follows: At low levels of female within alliance, all females reported low and similar levels of RDAS at session 4; at high levels of female within alliance, females who had a female therapist reported greater levels of relational satisfaction at session 4 in comparison to their counterparts who had a male therapist (Figure 4).

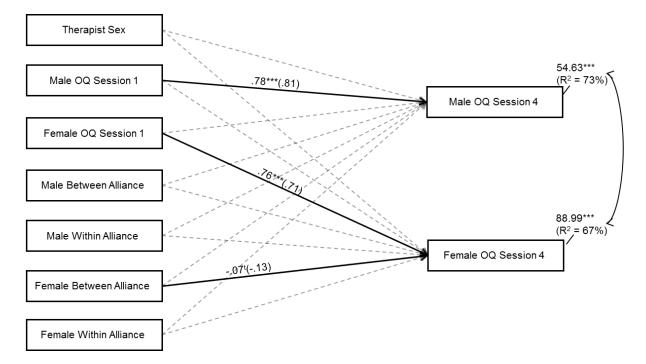


Figure 1. Actor-Partner Interdependence Model examining the impact of the between systems and within systems alliance on individual distress (OQ). Unstandardized and standardized coefficients (in parentheses) are provided. For clarity, significant paths are solid whereas non-significant paths are dotted. All exogenous variables were allowed to covary. Model was fully saturated.

Note. ${}^{t}p < .10; **p < .01; ***p < .001.$

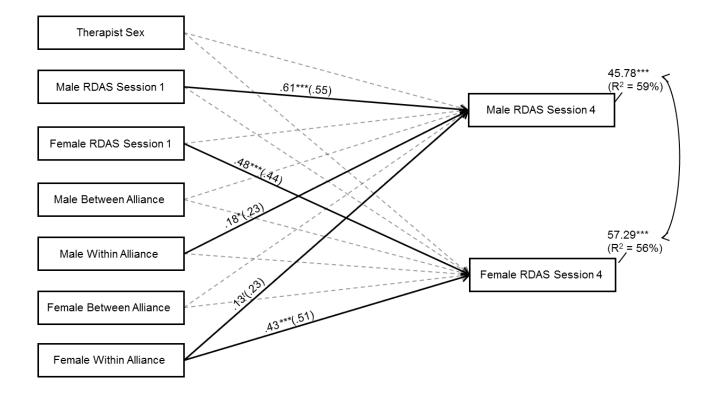


Figure 2. Actor-Partner Interdependence Model examining the relative impact of the between systems and within systems alliance on relational satisfaction (RDAS). Unstandardized and standardized coefficients (in parentheses) are provided. For clarity, significant paths are solid whereas non-significant paths are dotted. All exogenous variables were allowed to covary. Model was fully saturated.

Note. ${}^{t}p < .10$; **p < .01; ***p < .001.

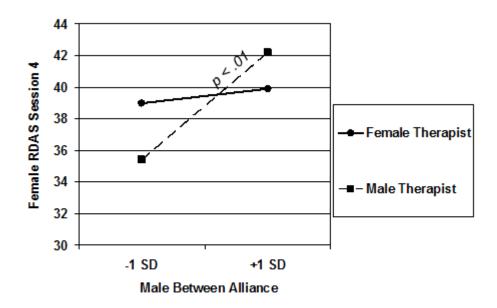


Figure 3. Plot depicting the moderating role of therapist sex among relations between Male Between Alliance and Female Relational Satisfaction Ratings at Session 4.

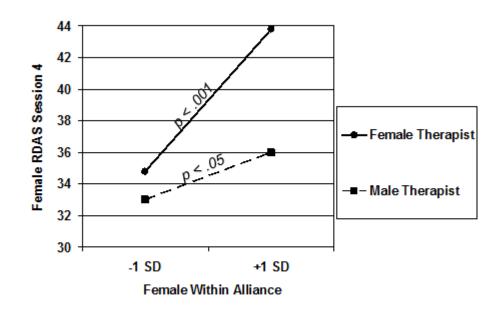


Figure 4. Plot depicting the moderating role of therapist sex among relations between Female Within Alliance and Female Relational Satisfaction Ratings.

Discussion

The current study found significant associations and moderating relationships between therapeutic alliance and outcomes while assessing for biological sex dynamics within the couple and therapist, an area of research that has been widely cited as wanting, due to lacking refined statistical methodology and limited data. Using a rich data set that included 10 years of couples data, an actor-partner interdependence model to assess for bi-directional influences in systemic therapy and testing for moderation, the study addresses many gaps noted in the alliance and outcome literature (Mahaffey & Granello, 2007; Bartle-Haring et al., 2012; Blow, Timm & Cox, 2008; Thomas, Werner-Wilson & Murphy, 2005).

Discussion of Results

Noncompleters and Completers. Significant differences were found between clients who completed fourth session paperwork and those who did not. Males with higher levels of individual distress at intake were more likely to discontinue therapy before session 4. Potential explanations exist. Males with more traditional gender role schemas may assign gendered stereotypes to their therapist, which may include perception of low effectiveness, inadequacy or inability to trust their therapist (Deering & Gannon, 2005). Males with higher levels of distress may not perceive couples therapy to be helpful and quickly withdraw from therapy. If the male perceives he is the "problem" or his individual distress is the focus of therapy, in addition to perceiving his therapist (statistically more likely to be female) aligning with his partner, it would be logical that he may not engage in therapy. Research consistently finds that men are more reluctant to engage in therapy than their partners, and that may be especially true for a male coming to couples therapy under duress, which may also contribute to higher dropout rates.

Females with lower levels of relationship satisfaction and lower levels of education are

significantly more likely to end therapy before session 4. In early therapy, it is possible relational issues because more clearly defined and females may decide to end their unhappy relationship abruptly, or lack motivation and desire to face the relational challenges needed to make serious changes in the relationship. In regard to females with less education, perhaps there are more barriers to therapeutic participation, including language or transportation. Therapists may experience increased difficulty working with females with less education due to the education disparity (AUMFT therapists are master's level). It would be interesting to investigate whether lower levels of education effect longer engagement in therapy across individual and family therapy as well. Unfortunately, alliance was not assessed after session one, and therefore poor initial alliance could not be assessed as a possible explanation for noncompleters.

Correlational Analyses. Correlational analyses revealed significant associations between both male and female alliance and outcomes. Higher ratings of alliance by males were associated with lower individual distress and higher relational satisfaction for both males and females, and vice versa. The same relationship was significant for female's rating of alliance. Similar to Anderson and Johnson (2010), these findings help support the assertion that actor and partner effects exist in couple's therapy when assessing alliance and outcomes. The findings support the larger consensus across previous literature that alliance is positively related to outcomes.

Individual distress. Although male and female individual distress was highly stable from intake to session 4, one actor effect was found. In the APIM, higher levels of female between alliance were related with her own decrease of individual distress. This finding suggests that as the female partner's perception of the relationships with the therapist are more positive, therefore signaling that her, the therapist and her partner are working toward similar outcomes, decreases in her personal anxiety, depression and levels of stress are more likely to occur. As Henry and

Strupp (1994) reported, clients who perceive a high level of alliance will perceive interactions as positive and therapeutic, regardless of modality or intervention. In modern society, discussing emotions and communicating are sex related characteristics skewed to females. Females may "feel better" from communicating with a therapist whereas males may experience increased anxiety and stress.

Anderson and Johnson (2010) assessed individual distress using the RDAS subscale "symptom distress", whereas this study incorporated the entire measure. Therefore, this study did not find higher male alliance with the therapist associated with increased female individual distress, or higher male alliance with his partner associated with decreased female distress, as presented by Anderson and Johnson. The purpose of this study did not include an investigation of the split alliance, a concept discussed by the authors to help explain the sex-related differences in alliance and individual distress in therapy.

Male between alliance was significantly related to male and female individual distress in correlation analyses but in the APIM, the variables were unrelated. In correlational analyses, other variables are not taken into consideration, nor was individual distress at intake. It is likely alliance was not related to individual distress at session 4 because the OQ measure was highly stable. Potentially, spanning a longer time frame may yield different results (e.g., one year lag between session 1 and the follow up). No moderation effects were detected in the model, potentially due, at least in part, to the small amount of potential variance left to be explained after controlling for the OQ measure at session 1.

Relational satisfaction. Two actor effects were discovered for the RDAS measure despite its relative stability from session 1 to session 4. Higher levels of male within alliance were related to his improved relational satisfaction. Additionally, higher levels of female within

alliance were related to her improved relational satisfaction. This indicated that when partners perceive that they work together to help each other, feel safe together, create shared goals, accept each other, trust and care about each other in therapy, they experience increased relational satisfaction.

A partner effect was detected in the model for females with higher ratings of alliance. When female within alliance was higher, male relational satisfaction was higher. It is important to consider the client-as-a-couple (Pinsof & Catherall, 1986), and recognize that males may react to her improved experience of her partner. Considering the dynamic systemically, if the female were to feel improvements between her and her partner, she would likely act toward her partner in a more positive manner. In turn, his perception of the relationship improves.

Therapist sex as a moderator. Moderation effects indicated that at higher levels of male between alliance, female ratings of relational satisfaction were higher when the couple engaged in therapy with a male therapist. Findings support the assertion that male's evaluation of alliance is an important predictor of outcomes (Bourgeois, Sabourin & Wright, 1990; Brown, 1998; Symonds & Horvath, 2004). Horvath, Symonds and Tapia (2010) purported that individuals react differently to sex imbalances, and it would appear that in couple therapy a close male partner and male therapist bond improves her satisfaction. A potential explanation for this finding is that the male therapist is able to facilitate a close bond with the male client. It is widely cited that males are more reluctant to engage in therapy and have higher rates of dropout. If a male therapist can facilitate a close relationship with the male client, the burden of convincing her partner to engage in therapy becomes lighter, which in turn bolsters her relational satisfaction. Another potential explanation that has been suggested by numerous researchers (although unsubstantiated by data) relates that young, particularly female therapists who foster

close alliance bonds with the male partner would hinder the female partner's positive outcomes based on jealousy, attraction, or perceived threat. These findings support the assertion that female partners are less likely to experience positive relational change when her male partner is closely bonded with the female therapist, though the question of why cannot be determined by the current study.

Lastly, a moderation effect was detected when female within alliance ratings are higher, her relational satisfaction increases at a higher rate with a female therapist than with a male therapist. At low levels of female within alliance, sex of the therapist matters less, but at higher levels of within alliance, females experience increases in relational satisfaction with female therapists. It is possible that female therapists offer no dual relationships to female clients, while male therapists may potentially serve as a comparison for what a socially and emotionally intelligent male could be. Potentially, these comparisons between her current relationship and this close bond with a male therapist could impede in her relational satisfaction. Although the within alliance between the female client and male client is improved, a female therapist may better harness that couple's bond and build upon the trust and caring in session and translate it to other aspects of their relationship.

Conclusion. A small amount of variance was left to explain after the autoregressive effects of the RDAS and OQ at intake to session 4, and it is important to highlight possible explanations for this. The findings appear to highlight a lack of change among the couples presenting to therapy. The statistical method used to assess the research questions used means, and therefore did not illuminate pathways of change for those couples who experienced change, those who deteriorated and those who remained the same. It would be too broad a conclusion to report that couples did not experience change in any direction, and improved statistical methods

are needed to clarify the experiences of couples from intake to session 4.

Considering the results together in the context of sex of the client and therapist respectively, what do women want? Indicative of the moderation effects and speaking in general terms, women want their man to have a close bond with a male therapist, but would rather have a female therapist when her and her partner begin to improve the relationship within the couple. Reviewing relational trends, the woman is driving her partner's satisfaction, as evidenced by his improved relational satisfaction when she feels connected to him. Her attitudes and feelings toward him matter, and he feels the change when she feels better about their relationship. Both partners feel better about one another when they perceive they are working together toward their mutual therapeutic goals. Individually, when the therapist cares about "us", her partner feels accepted by the therapist, the therapist is helpful, and the therapist understands the relationship between her and her partner, the woman perceives great relationships all around in the therapy room. Already, she is feeling better about herself, she may feel less nervous and anxious.

Clinical Implications

The results of this study are clinically relevant and applicable to clinicians working with couples. Most significant findings were found when within system alliance was more highly rated, indicating that in this study, much of the change in couples outcomes through alliance are attributed to the bond between the partners. Symonds and Horvath (2004) reported that a degree of trust, sense of security and connection between partners is an important facet in alliance formation, which affects the success of therapy. When couples experience positive interactions and teamwork in therapy, they are likely to report improved experiences of one another. Therapists should be mindful of the potential positive factor arising from fostering the alliance between partners. The caring bond and shared goals improve relational satisfaction for both

partners while decreasing individual symptoms for women. Exploring these dynamics in session to ameliorate or enhance the bond between partners may lead to more positive outcomes.

It is particularly important for therapists to discuss the nature of the therapeutic relationship from the first session, and continue an open dialogue throughout treatment. For female therapists, be mindful of the within system alliance, especially in relation to the male partner's therapeutic bond, in relation to the female partner's therapeutic bond. Working to turn partners towards one another while therapeutically aligning with both partners seems indicated. Male therapists can feel more comfortable building a close bond with the male client, but be careful to avoid comparisons between the male client and self. Female clients do not experience the same improvements in their relational satisfaction with male therapists; therefore make a concerted effort to process her satisfaction outside of the therapy room. Knoblock-Fedder et al. (2004) suggested first engaging male clients while maintaining rapport with the female client, although the study did not consider therapist sex.

Therapy, therapeutic alliances, interventions and effectiveness can be biased based on client perceptions of sex of the therapist and underlying beliefs about biological sex dynamics. Therapists are advised to discuss sex and gender dynamics, thoughts, and values with their clients. Affirm client values and beliefs, and check in with their understanding of the relationships throughout therapy. There is an immediate sex imbalance when a couple presents to heterosexual couples therapy, and how clients respond in that critical period of initial therapy can effect early alliance and in turn, therapy outcomes (Horvath et al., 2010).

It is important to recognize therapist bias as clinicians interact with a variety of clients. In the results about the non-completers and completers, some significant differences were found between the groups. Males who reported higher individual distress and females who reported

lower relational satisfaction and lower levels of education were less likely to complete session 4 paperwork. Clients who indicate these characteristics may be referred to as difficult clients because they present with more difficult cases. Therapists must put forth increased efforts to engage these clients in therapy. There are discussions whether or not therapists should call clients and engage in the extra steps towards establishing a connection, but therapists should establish a practice of engagement and follow through their protocol with each client, without avoiding contact with more difficult cases. With universal protocol of engagement and decreased avoidance of difficult cases, it is possible these difficult-type client cases would more likely engage in therapy and become completers.

Strengths and Limitations

Study strengths. Horvath, Symonds and Tapia (2010) warned against interpreting sex differences in alliance formation too quickly because of the lack of empirically validated studies. Fortunately, this study aids in the understanding of the dynamic and complex nature of alliance in couples therapy, with specific attention paid to sex associations and the moderating role of sex of the therapist. Gaps in the literature addressed by this study include therapist variables that lack in alliance research (Barber, Crits-Christoph, & Luborsky, 1996), previous difficulty quantifying pathways from alliance to outcomes with multiple clients (Celano, Smith & Kaslow, 2010), ways clients in heterosexual relationships respond to the inevitable sex imbalance (Horvath, Symonds & Tapia, 2010) and express statements that biological sex should be regularly included in future alliance research (Garfield, 2004).

Another strength of the study is the use of sophisticated research methods. The actorpartner interdependence model is most appropriate for modeling dyadic data while taking into account the bi-directional influences in a systemic model. Appropriate modeling allows for

effective use of moderation exploration. The large sample size (N=432) is a strength of the study, in addition to reliable and valid measures (e.g., CTAS, RDAS and OQ) used to assess study constructs.

Limitations. It would not be appropriate to generalize these findings to a larger population because data were collected from clients at an MFT training facility at a university setting in the southeastern United States. Additionally, therapists were in training, and therefore findings may not be generalizable to other settings or other therapists, with the exception of similar MFT training facilities. Clients at the AU MFT Center entered therapy willingly, and therefore it is a convenience sample. Causation cannot be inferred because the methodological design was correlational. In addition, alliance was not assessed at the first time point with the initial assessment of relational satisfaction and individual distress, and thus findings may be attributed to a halo effect. Directionality may be reversed due to inability to establish causality.

This study utilized the entire OQ measure instead of the subscale "symptom distress" (Anderson & Johnson, 2010) which may contain items that conceptually overlap with the RDAS. Limited time points (intake and session 4) in which alliance and outcomes were assessed potentially restrict and truncate findings that may have longer reaching trends or associations with increased assessment points later in the therapeutic process.

Future Directions

Therapist and client biological sex associations are understudied aspects of the alliance formation process and impact on couple therapy outcomes. It is important that additional studies are conducted to clarify, expand and validate the findings presented. Findings from this study explored biological sex (a dichotomous sex variable) instead of gender. In the future, assessments should consider various gender measures, self-identification, and be cognizant of the

issues presented when sexual orientation becomes a more typical demographic variable over biological sex.

Attachment style would be an important addition to the alliance formation process, as this may impede the ability and tendency to form close, trusting, and cohesive bonds necessary for alliance formation. Perhaps there are affective barriers that stifle alliance formation in couples' therapy, particularly taking in consideration sex and gender variables.

In the future, researchers should consider including presenting problem as a variable in alliance and outcome studies. There may be distinct differences in couples that present for an individual complaint (e.g. depression) as opposed to a couple that presents to work on marital communication. Presenting problem or why couples came to therapy may illuminate differences in the outcomes measures (RDAS and OQ) that measured individual outcomes and couple outcomes. Presenting problem was not included in the current study because too few couples reported specifically individual concerns (N=8). A different method of measurement instead of write-in may be useful to clarify presenting problem for future research.

Hierarchical linear modeling could be used in a similar study to illuminate the pathways of change experienced by couples in therapy. The current study model used means to describe change over time, which essentially canceled out couples who experienced change by counteracting their scores with couples who digressed. To address this study limitation, different statistical analyses and use of methodology would be appropriate.

In an additional study, it would be vital to assess alliance and outcome variables across time to more clearly establish directionality. Best practice would be to assess alliance immediately following session one and continue at regular intervals. Do the associations continue to influence outcomes across time, or are there saturation levels in which alliance no

longer influences outcomes significantly? Perhaps a qualitative study to investigate the minute alliance formation changes in couples' therapy considering gender would reveal important patterns.

References

- Ackerman, S. J., & Hilsenroth, M. J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. *Clinical Psychology Review*, *23*(1), 1.
- Acock, A. C. (2005). Working with missing values. *Journal of Marriage and Family*, 67, 1012–1028.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park: Sage.
- Anderson, S. R., & Johnson, L. N. (2010). A Dyadic Analysis of the Between- and Within-System Alliances on Distress. *Family Process*, 49(2), 220-235.
- Anker, M. G., Owen, J., Duncan, B. L., & Sparks, J. A. (2010). The alliance in couple therapy:
 Partner influence, early change, and alliance patterns in a naturalistic sample. *Journal of Consulting and Clinical Psychology*, 78(5), 635-645.
- Atkinson, D. R., Worthington, R. L., Dana, D. M., & Good, G. E. (1991). Etiology beliefs, preferences for counseling orientations, and counseling effectiveness. *Journal of Counseling Psychology*, 38, 258-264.
- Azrin, N., Naster, B., & Jones, R. (1973). Reciprocity counseling: A rapid learning based procedure for marital counseling. *Behavior Research and Therapy*, *11*, 365-382.
- Barber, J. P., Connolly-Gibbons, M. B., Crits-Cristoph, P., Gladis, L., & Siqueland, L. (2000).
 Alliance predicts patients' outcome beyond in-treatment change in symptoms. *Journal of Consulting and Clinical Psychology*, 68, 1027–1032.
- Barber, J. P., Crits-Christoph, P., & Luborsky, L. (1996). Effects of therapist adherence and competence on patient outcome in brief dynamic therapy. *Journal of Consulting and Clinical Psychology*, 64, 619-622.

- Barrett-Lennard, G. T. (1978). The Relationship Inventory: Later development and adaptations. JSAS Catalog of Selected Documents in Psychology, 8, 68.
- Bartle-Haring, S., Knerr, M., Adkins, K., Delaney, R. O., Gangamma, R., Glebova, T., Grafsky,
 E., McDowell, T., & Meyer, K. (2012). Trajectories of therapeutic alliance in couple
 versus individual therapy: Three-level models. *Journal of Sex and Marital Therapy, 38*, 79–107.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56(6), 893-897.
- Bedi, R. P., & Horvath, A. O. (2004). Balanced versus biased alliance: Perceptions of own and partner's alliance and psychotherapeutic outcome in short-term couples therapy. *Journal of Couple and Relationship Therapy*, 3(4), 65-80.
- Bertagnolli, S. J. (2012). Couple satisfaction and individual symptom distress: Forming an alliance in couples therapy. (Unpublished master's thesis). Auburn University, Auburn Alabama.
- Beutler, L. E., Malik, M., Alimohamed, S., Harwood, T. M., Talebi, H., Noble, S., et al. (2004).
 Therapist variables. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed., pp. 227-306). New York: Wiley.
- Blanton, P. W., & Vandergriff-Avery, M. (2001). Marital therapy and marital power: Constructing narratives of sharing relational and positional power. *Contemporary Family Therapy: An International Journal*, 23(3), 295-308.
- Blow, A. J., Sprenkle, D. H., & Davis, S. D. (2007). Is Who Delivers the Treatment More
 Important than the Treatment Itself? The Role of The Therapist in Common Factors. *Journal Of Marital & Family Therapy*, *33*(3), 298-317.

- Blow, A. J., Timm, T. M., & Cox, R. B. (2008). The role of the therapist in therapeutic change: Does therapist gender matter? *The Journal of Feminist Family Therapy*, 20, 66-86.
- Bourgeois, L., Sabourin, S., & Wright, J. (1990). Predictive validity of therapeutic alliance in group marital therapy. *Journal of Consulting and Clinical Psychology*, *58*(5), 608-613.
- Bordin, E. (1975). The working alliance and bases for general theory of psychotherapy. Paper given at the annual meeting of the American Psychological Association, Washington, DC.
- Bordin, E. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice, 16*, 252-260.
- Brown, P.D. (1998) *The therapeutic alliance: A predictor of continuance and success in a couples treatment program for martially violent men.* Unpublished dissertation, State University of New York at Stony Brook.
- Brown, P. D., & O'Leary, K. D. (2000). Therapeutic alliance: Predicting continuance and success in group treatment for spouse abuse. *Journal of Consulting and Clinical Psychology*, 68(2), 340-345.
- Castonguay, L. G., Constantino, M. J., & Holtforth, M. G. (2006). The working alliance: Where are we and where should we go? *Psychotherapy: Theory, Research, Practice, Training,* 43(3), 271-279.
- 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(3), 497-504.
- Castonguay, L. G., & Beutler, L. E. (2006). Principles of therapeutic change: A task force on participants, relationships, and techniques factors. *Journal Of Clinical Psychology*, 62(6), 631-638.

- Celano, M. P., Smith, C. O., & Kaslow, N. J. (2010). A competency-based approach to couple and family therapy supervision. *Psychotherapy Theory, Research, Practice, Training,* 47(1), 35-44.
- Cook, W. L., & Snyder, D. K. (2005). Analyzing Nonindependent Outcomes in Couple Therapy Using in Actor-Partner Interdependence Model. *Journal Of Family Psychology*, 19(1), 133-141.
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, *112*, 558-577.
- Coupland, S. K., & Serovich, J. M. (1999). Effects of Couples' Perceptions of Genogram
 Construction on Therapeutic Alliance and Session Impact: A Growth Curve Analysis.
 Contemporary Family Therapy: An International Journal, 21(4), 551.
- Cousineau, D., & Chartier, S. (2010). Outliers detection and treatment: a review. *International Journal of Psychological Research*, *3*, 2011-2084.
- Crits-Christoph, P.. & Connolly-Gibbons, M. (1999). Alliance and technique in short-term dynamic therapy. *Clinical Psychology Review*, *19*(6), 687-704.
- Crits-Christoph, P. Connolly-Gibbons, M., & Hearon, B. (2006) Does the alliance cause good outcome? Recommendations for future research on the alliance. *Psychotherapy: Theory, Research, Practice, Training, 43*(3), 280-285.
- Deering, C., & Gannon, E. J. (2005). Gender and Psychotherapy with Traditional Men. *American Journal Of Psychotherapy*, *59*(4), 351-360.

- DeRubeis, R. J., Brotman, M. A., & Gibbons, C. J. (2005). A conceptual and methodological analysis of the nonspecifics argument. *Clinical Psychology: Science and Practice*, 12, 174-183.
- Diamond, G. M., Liddle, H. A., Dakof, G. A., & Hogue, A. (1996). Revised version of the Vanderbilt Therapeutic Alliance Scale. Unpublished manuscript, Temple University, Philadelphia, PA.
- Duncan, B. L., Miller, S. D., Reynolds, L., Sparks, J., Claud, D., Brown, J., & Johnson, L. D.
 (2003). The session rating scale: Psychometric properties of a "working" alliance scale. *Journal of Brief Therapy*, 3(1), 3–12.
- Epstein, N.B., Baldwin, L.M., & Bishop, D.S. (1983). The McMaster family assessment device. *Journal of Marital and Family Therapy*, *9*, 171-180.
- Feeley, M., DeRubeis, R. J., & Gelfand, L. A. (1999). The temporal relation of adherence and alliance to symptom change in cognitive therapy for depression. *Journal of Consulting* and Clinical Psychology, 67, 578–582.
- Flückiger, C., Del Re, A. C., Wampold, B. E., Symonds, D., & Horvath, A. O. (2012). How central is the alliance in psychotherapy? A multilevel longitudinal meta-analysis. *Journal* of Counseling Psychology, 59(1), 10-17.
- Freud, S. (1912). The dynamics of transference. In J. Strachey (Ed. & Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 12, pp. 99-108).
 London, England: Hogarth Press.
- Friedlander, M. L., Escudero, V., Heatherington, L., & Diamond, G. M. (2011). Alliance in couple and family therapy. *Psychotherapy*, 48(1), 25-33.

Friedlander, M.L., Escudero, V., & Heatherington, L. (2006). Therapeutic alliances in couple

and family therapy. Washington, DC: APA Press.

- Garfield, R. (2004). The Therapeutic Alliance in Couples Therapy: Clinical Considerations. *Family Process*, *43*(4), 457-465.
- Gaston, L. (1990). The concept of the alliance and its role in psychotherapy: Theoretical and empirical considerations. *Psychotherapy: Theory, Research, Practice, Training*, 27(2), 143-153.
- Greenson, R.R. (1967). *The technique and practice of psychoanalysis*. New York: International Universities Press.
- Hammarström, A., & Phillips, S. P. (2012). Gender inequity needs to be regarded as a social determinant of depressive symptoms: Results from the Northern Swedish cohort. *Scandinavian Journal Of Public Health*, 40(8), 746-752.
- Hatcher, R. L., & Barends, A. W. (1996). Patients' view of the alliance in psychotherapy:
 Exploratory factor analysis of three alliance measures. *Journal of Consulting and Clinical Psychology*, 64, 1326-1336.
- Heatherington, L., & Freidlander, M.L. (1990). Couple and Family therapy alliance scale: Empirical considerations. *Journal of Marital and Family Therapy*, *16*, 299-306.
- Heppner, P. P., & Petersen, C. H. (1982). The development and implications of a personal problem solving inventory. *Journal of Counseling Psychology*, 29(1), 66-75.
- Henry, W. P. & Strupp, H. H. (1994) The therapeutic alliance as interpersonal process in A. O.Horvath and L. S. Greensberg (Eds.) *The Working Alliance: Theory, Research andPractice*. New York: Wiley.
- Hunter, J., & Schmidt, F. (1990). Dichotomization of Continuous Variables: The Implications for Meta-Analysis. *Journal of Applied Psychology*, 75(3), 334-349.

- Horvath, A. O. (1982) Working Alliance Inventory (Revised). *Instructional Psychology Research Group*, 82 (1). Simon Fraser University Burnaby, British Columbia, Canada.
- Horvath, A. O., & Bedi, R. P. (2002). The alliance. In J. C. Norcross (Eds.), *Psychotherapy relationships that work: Evidence-based responsiveness* (pp. 37–69). New York, NY: Oxford University Press.
- Horvath, A., & Greenberg, L. (1994). *The Working Alliance: Theory, Research and Practice*. New York, NY: John Wiley & Sons, Inc.
- Horvath, A., & Greenberg, L. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology*, *36*(2), 222-233.
- Horvath, A. O. (2000). The therapeutic relationship: From transference to alliance. *Journal of Clinical Psychology*, *56*(2), 163-173.
- Horvath, A. O., & Symonds, B. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, *38*(2), 139-149.
- Horvath, A. O., Symonds, D., & Tapia, L. (2010). Therapeutic alliances in couple therapy: The web of relationships. In J. C. Muran & J. P. Barber (Eds.), *The Therapeutic Alliance: An Evidence-Based Guide to Practice* (p. 210-239). New York: Guilford.
- Howard, K.I., Brill, P.L., Lueger, R.J., O'Mahoney, M.T., & Grissom, G.R. (1995). *Integra outpatient tracking assessment*. Philadelphia: Compass Information Services, Inc.
- Johnson, S. M., & Talitman, E. E. (1997). Predictors of Success in Emotionally Focused Therapy. *Journal Of Marital & Family Therapy*, *23*(2), 135-152.
- Johnson, L. N., & Wright, D. W. (2002). Revisiting Bordin's Theory on the Therapeutic Alliance: Implications for Family Therapy. *Contemporary Family Therapy: An International Journal*, 24(2), 257.

- Kashy, D. A., & Kenny, D. A. (2000) The analysis of data from dyads and groups. In H. T. Reis
 & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 451-477). New York: Cambridge University Press.
- Kivlighan, D. M., Jr., & Shaughnessy, P. (2000). Patterns of working alliance development: A typology of working alliance ratings. *Journal of Counseling Psychology*, 47, 362-371.
- Kivlighan, D. M., Jr. (2007). Where's the relationship in research on the alliance? Two methods for analyzing dyadic data. *Journal of Counseling Psychology*, *54*, 423-433.
- Knobloch-Fedders, L. M., Pinsof, W. M., & Mann, B. J. (2004). The formation of the therapeutic alliance in couple therapy. *Family Process*, 43, 425-442.
- Knobloch-Fedders, L. M., Pinsof, W. M., & Mann, B. J. (2007). Therapeutic alliance and treatment progress in couple psychotherapy. *Journal of Marital and Family Therapy*, 33(2), 245–257.
- Lambert, M. J., & Bergin, A. E. (1994) The effectiveness of psychotherapy. In A. E. Bergin and S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (pp. 143-189). New York: Wiley.
- Lambert, M.J., Burlingame, G.M., Umphress, V., Hansen, N.B., Vermeersch, D.A., Clouse,G.C., & Yanchar, S.C. (1996). The reliability and validity of the Outcome Questionnaire.*Clinical Psychology and Psychotherapy*, *3*, 249-258.
- Locke, H. J., & Wallace, K. M. (1959). Short marital-adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, *21*, 251–255.
- Long, L. E. (2011). Therapist effectiveness, the therapeutic alliance, and change in couples therapy: An exploratory study. (Unpublished master's thesis). Auburn University, Auburn Alabama.

- Luborsky, L. (1976). Helping alliances in psychotherapy: The groundwork for a study of their relationship to its outcome. In J. L. Claghorn (Ed.), *Successful psychotherapy* (pp. 92-116). New York: Brunner/Mazel.
- Mahaffey, B. A., & Granello, P. F. (2007). Therapeutic Alliance: A Review of Sampling
 Strategies Reported in Marital and Family Therapy Studies. *Family Journal*, 15(3), 207-216.
- 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(3), 438–450.
- Miller, S. D., & Duncan, B. L. (2004). *The Outcome and Session Rating Scales: Administration and scoring manual*. Ft. Lauderdale, FL: Authors.
- Mueller, R.M., Lambert, M.J., & Burlingame, G.M. (1998). Construct validity of the Outcome Questionnaire: A confirmatory factor analysis. *Journal of Personality Assessment*, 70(2), 248-262.
- Muran, J., & Safran, J. D. (1995). Linking in-session change to overall outcome in short-term cognitive therapy. *Journal Of Consulting & Clinical Psychology*, 63(4), 651.
- Moos, R. & Moos, B. (1994). Family Environment Scale Manual: Development, Applications, Research - Third Edition. Palo Alto, CA: Consulting Psychologist Press.
- Orlinski, D. E., Grave, K., & Parks, B. K. (1994). Process and outcome in psychotherapy. In A.E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy* (pp. 257-310). New York, NY: Wiley.
- Patterson, G. R. (1976). Some procedures for assessing changes in marital interaction patterns. *Oregon Research Institute Research Bulletin*, *16*(7).

- Pinsof, W. M., & Catherall, D. R. (1986). The integrative psychotherapy alliance. Journal of Marital and Family Therapy, 12, 132–151.
- 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. 17395). New York: Wiley.
- Pinsof, W. M., Zinbarg, R., & Knobloch-Fedders, L. M. (2008). Factorial and Construct Validity of the Revised Short Form Integrative Psychotherapy Alliance Scales for Family, Couple, and Individual Therapy. *Family Process*, 47, 281-301.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational & Behavioral Statistics*, 31, 437-448.
- Quinn, Q., Dotson, D., & Jordan, K. (1997). Dimensions of therapeutic alliance and their associations with outcome in family therapy. *Psychotherapy Research*, *7*, 429-438.
- Rait, D. S. (2000). The therapeutic alliance in couples and family therapy. *Journal Of Clinical Psychology*, 56(2), 211-224.
- Roach, A. R., Frazier, L. P., & Bowden, S. R. (1981). The Marital Satisfaction Scale:
 Development of a Measure for Intervention Research. *Journal of Marriage and Family*, 43(3), 537-546.
- Rogers, C. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21(2), 95-103.
- Safran, J.D. & Muran, J.C. (1996), The resolution of ruptures in the therapeutic alliance. *Journal* of Consulting & Clinical Psychology, 64, 447-458.

Shadish, W. R., & Montgomery, L. M. (1993). Effects of family and marital psychotherapies: A

meta-analysis. Journal Of Consulting & Clinical Psychology, 61(6), 992.

- Spanier, G. B. (1976). Measuring Dyadic Adjustment: New Scales for Assessing the Quality of Marriage and Similar Dyads. *Journal Of Marriage & Family*, 38(1), 15-28.
- Sprenkle, D. H., & Blow, A. J. (2004). Common factors and our sacred models. *Journal of Marital and Family Therapy*, 30, 113-130.
- Snyder, D. K. (1997). *Marital satisfaction inventory, revised*. Los Angeles, CA: Western Psychological Services.
- Sterba, R. (1934). The fate of the ego in analytic therapy. International Journal of Psychoanalysis, 15, 117-125.
- Stiles, W. B., Shapiro, D. A., & Elliott, R. (1986). "Are all psychotherapies equal?" American Psychologist, 41, 165-180.
- Symonds, D. and Horvath, A. O. (2004), Optimizing the Alliance in Couple Therapy. *Family Process*, *43*, 443–455.
- Symonds, D. (1999). The measurement of alliance in short term couples therapy. Unpublished Doctoral Dissertation, Simon Fraser University.
- Thomas, S. E. G., Werner-Wilson, R. J., & Murphy, M. J. (2005). Influence of therapist and client behaviors on therapy alliance. *Contemporary Family Therapy*, 27, 19-45.
- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the Working Alliance Inventory. *Psychological Assessment, 1,* 207-210.

Appendix

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 | Stro Disa 2 | gree | (| Compl Disag 1 | • | | |
|--|------------------------|--------------------|--------------------|----------------------|-------------------|--------|--------|---------------------|--------|--------|--------|
| 1. The therapist cares al | bout me as a person | n | | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 2. The therapist and I and | re not in agreement | t about the goal | s for this therapy | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 3. My partner and I help | p each other in this | therapy. | | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 4. My partner and I do | not feel the same w | vays about what | t 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 relationship.7. My partner feels according to the second second | - | | tner and myself | with our | 7 7 | 6 6 | 5 5 | 4 4 | 3 3 | 2 2 | 1 1 |
| • • | | | ioon mu portnor (| and muscilf | , 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8. The therapist does no | | - | een my partner a | and myself. | 7 7 | | 5 5 | 4 | | 2 | 1 |
| 9. The therapist underst | | | | | | 6 | | | 3 | | |
| 10. The therapist and m therapy. | | - | out the about the | goals for this | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 11. My partner cares ab | _ | - | | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 12. My partner and I do | | | 1. | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 13. My partner and I un | iderstand each othe | er's goals for the | is therapy. | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 14. The therapist does r this therapy. | | | | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 15. My partner and the conducted.16. The therapist does r | | | the way the thera | ipy is being | 7 7 | 6 6 | 5 5 | 4 4 | 3 3 | 2 2 | 1 1 |
| 17. The therapist does 1 | | | relationshin | | , 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 18. I am not satisfied w | | a me with our r | ciutonsinp. | | , 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 19. My partner and I un | | h of us is doing | in this therapy | | , 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 20. My partner and I do | | • | | | , 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | _ | | | | , 7 | 6 | 5 | | 3 | 2 | 1 |
| 21. The therapist under | | - | merapy. | | 7 | | | 4 | 2 | 2 | |
| 22. I do not feel accepte | | | | | / | 6 | 5 | 4 | 3 | 2 | 1 |
| 23. The therapist and I | - | bout the way the | e therapy is being | g 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 a couple in this thera | ipy. | | | e for ourselves as a | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 26. The therapist does r | | - | | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 27. My partner and I are | e in agreement with | h each other ab | out the goals of t | his 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 | 2 | 1 |
| 30. The therapist is not helping my partner. | | 7 | 6 | 5 | | 4 | 3 | 2 | 2 | 1 |
| 31. My partner is satisfied with the therapy. | 7 | 6 | 4 | 5 | 4 | 3 | | 2 | 1 | |
| 32. I do not care about the therapist as a person. | 7 | 6 | 4 | 5 | 4 | 3 | | 2 | 1 | |
| 33. The therapist has the skills and ability to help my partner. | 7 | 6 | 4 | 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 | 4 | 5 | 4 | 3 | | 2 | 1 | |
| 35. My partner and I trust each other in this therapy. | 7 | 6 | 4 | 5 | 4 | 3 | | 2 | 1 | |
| 36. My partner and I distrust the therapist. | 7 | 6 | 4 | 5 | 4 | 3 | | 2 | 1 | |
| 37. The therapist cares about the relationship between my partner and myself. | 7 | 6 | 4 | 5 | 4 | 3 | | 2 | 1 | |
| 38. The therapist does not understand my partner. | 7 | 6 | 4 | 5 | 4 | 3 | | 2 | 1 | |
| 39. My partner and I care about each other in this therapy. | 7 | 6 | 4 | 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 | 4 | 5 | 4 | 3 | | 2 | 1 | |

RDAS

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

| | Always agree | Almost Always Agree | Occasionally Agree | Frequently Disagree | Almos Alway Disagr | Always ⁷⁸ Disagree |
|---|--|---------------------------|-----------------------|------------------------|--------------------------|----------------------------------|
| Religious matters Demonstrations of affection Making major decisions Sex relations Conventionality-correct/proper behavior | | | | | | - |
| 6. Career decisions | | | | | | |
| | | | All the Most the time | More offen | Occa- sionally | Rarely Never |
| How often do you discuss or have you separation, or terminating your relation How often do you and your partner qui Do you ever regret that you married (constraints) How often do you and your mate "get" | onship? arrel? or live together) |)? | | | | |
| | | Every Day | Almost Every Day | Occasionally | Rarely | Never |
| 11. Do you and your mate engage in outs together? | side interests | | | | | |

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

| | Never | Less than once a month | Once or twice a month | Once or twice a week | Once a day | More often |
|---|-------|------------------------|--------------------------|----------------------------|------------|---------------|
| 12. Have a stimulating exchange of ideas13. Work together on a project | | | | | | |
| 14. Calmly discuss something | | | | | | |
| 14. Canniy discuss something | | | | | | |

Outcome Questionnaire (OQ®-45.2)

Instr uctions: 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. Please do not make any marks in the shaded areas.

| Name: | Age:yrs. |
|-------|----------|
| | Sex |
| ID# | MD FD |

Total

| (S | ession # Date / / | | | | | Al ort | L SD IR SR BELO |
|------------|---|------------|------------|------------|------------|--------------------|------------------------|
| | | Never | Rarely S | Sometimes | Frequently | Al ost y Always | L DO OT BELO |
| Ι. | I get along well with others. | 04 | 03 | O 2 | Dl | D 0 | c::J |
| 2. | I tire quickly. | O 0 | 01 | 02 | 03 | 04 | |
| 3. | I feel no intere t in things. | DO | 01 | 02 | 03 | 04 | c=l |
| 4. | I feel stressed at work/schooi | 0 0 | OJ | 02 | O 3 | 04 | CJ |
| 5. | I blame myselffor things. | DO | 01 | 02 | 03 | 04 | |
| 6. | I feel irritated | O 0 | Dl | 02 | 03 | 04 | c:::::Jc=J |
| 7. | I feel unhappy in my marriage/significant relationship. | DO | 01 | 02 | 03 | 04 | 0 |
| | I have thoughts of ending my life | D 0 | Dl | 02 | 03 | 04 | ·, |
| | I feel weak. | DO | 01 | 02 | 03 | 04 | |
| | I feel fearful. | O 0 | D1 | 02 | O 3 | 04 | |
| II. | After heavy drinking, I need a drink the next morning to get going. (If you do not drink, mark "never") | DO | OJ | 02 | 03 | 04 | |
| 12 | I find my work/school satisfying | 04 | 03 | 02 | 01 | D 0 | c:::J |
| | I am a happy person. | 04 | 03 | 02 | Dl | D 0 | CJ |
| | I work/study too much | | 01 | 02 | 03 | 04 | c=1 |
| | I work/study too inucli I feel worthless. | 00 DO | 01 | 02 | 03 | 04 | CJ |
| | I am concerned about family troubles | | 01 | 02 | 03 | 04 | CJ |
| | I have an unfulfilling sex life. | 00 DO | Dl | 02 | 03 | 04 | cJ |
| | - | | 01 | 02 | 03 | 04 | cJ |
| | I feel lonely | | | | | | cJ |
| | have frequent arguments. | DO | 01 | 02 | 03 | 04 | |
| | I feel loved and wanted | | 03 | 02 | OJ | DO | c:::Jc:::J |
| | I enjoy my spare time. | 04 | 03 | 02 | Dl | D 0 | cJ |
| 22. | I have difficulty concentrating | | OJ | 02 | 03 | 04 | c::J |
| | I feel hopeless about the future. | DO | DI | 02 | 03 | 04 | ĊĴ |
| 24. | I like myself. | | 03 | 02 | 01 | DO | |
| 25. | Disturbing thoughts come into my mind that I cannot get rid of. | DO | Dl | 02 | D3 | 04 | |
| 26. | I feel annoyed by people who criticize my drinking (or drug use) (If not applicable, mark "never ") | O 0 | DI | 02 | 03 | 04 | |
| | I have an upset stomach. | DO | Dl | 02 | 03 | 04 | C |
| 28. | I am not working/studying as well as I used to | O 0 | DI | 02 | O 3 | O 4 | 00 |
| 29. | My heart pounds too much. | DO | DI | 02 | 03 | 04 | 0J |
| 30. | I have trouble getting along with friends and close acquaintances | O 0 | Dl | 02 | 03 | 04 | |
| 31. | I am satisfied with my life. | D 4 | 03 | 02 | DΙ | DO | CiiiJ , |
| 32. | I have trouble at work/school because of drinking or drug use | O 0 | DI | 02 | O 3 | 04 | ·/* |
| 33. | I feel that something bad is going to happen. | DO | DI | 02 | D3 | 04 | CJ |
| | I have sore muscles. | O 0 | DI | 02 | 03 | 04 | |
| | I feel afraid of open spaces, of driving, or being on buses, subways, and so forth. | DO | 01 | 02 | D3 | 04 | |
| 36 | I feel nervous | 0 0 | O 1 | 02 | 03 | 04 | c:::::J c:::J |
| | I feel my love relationships are full and complete. | 04 | 03 | 02 | OJ | DO | т |
| 38. | | | Dl | D 2 | 03 | 04 | C:=J |
| 39. | I have too many disagreements at work/school. | DO | 01 | 02 | 03 | 04 | C::J |
| 40. | I feel something is wrong with my mind | | Dl | 02 | 03 | 04 | |
| 41. | I have trouble falling asleep or staying asleep. | DO | 01 | 02 | 03 | 04 | |
| 41. | I feel blue | | Dl | 02 02 | 03 | 04 | CJ |
| 42. 43. | I am satisfied with my relationships with others. | D 0 04 | 03 | 02 | D1 | DO | C:::J |
| 43. 44. | | | 01 | 02 02 | 03 | O 4 | |
| | I have headaches. | DO | 01 | D2 | 03 | 04 | c=J |
| чJ. | i have neudaches. | 72 | V 1 | ~ - | | <u> </u> | + + |