

THE THERAPEUTIC ALLIANCE IN COUPLE THERAPY: AN EXAMINATION OF  
ACTOR AND PARTNER EFFECTS OF THE ALLIANCE ON DISTRESS

by

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(Under the Direction of Lee N. Johnson)

ABSTRACT

The therapeutic alliance has a rich history in individual therapy where it has been consistently associated with gains in therapy. Despite this consistent link between alliance and outcome, theorizing and research on the alliance in couple therapy has lagged behind. One reason for this is that the non-independence of data from partners in couple therapy has limited the ability of researchers to address dyadic questions without violating the assumptions of traditional analytic models. This study uses recent analytical advances to examine the therapy alliance using the couple rather than the individual as the unit of analysis. It examines the effect of each partner's alliance on his own outcome (actor effect), and on his partner's outcome (partner effect). Additionally, this study evaluates whether there are sex differences in the strength of these effects on outcome. Finally, this study examines the differential effects of the between and within systems alliance as well as the goals, tasks and bonds subscales of the alliance on distress. 173 couples receiving treatment for marital distress at 2 university clinics completed the Revised Dyadic Adjustment Scale, a measure of relational distress, and the Outcome Questionnaire-45.2, a measure of individual distress, prior to treatment and again following the 4<sup>th</sup> session of therapy. The Couple Therapy Alliance Scale was administered

following session 4. The actor-partner interdependence model was used to simultaneously regress each partner's level of distress at session 4 on 1st session distress and alliance. Results provide support for actor effects on relational distress for both husbands and wives, and on individual psychological distress for wives. Limited support was found for partner effects on distress. The results of this study failed to support the hypothesis that there are sex differences in the relationship between alliance and distress. Models evaluating the relative importance of the between and within systems alliances on distress indicate that the alliance between partners is a stronger predictor of improvement than the alliance between the individual and the therapist. Finally, support was found for the importance of the tasks and goals domains of the alliance in the early sessions of therapy.

**INDEX WORDS:**      Therapeutic alliance, couple therapy, dyadic data, actor-partner interdependence model

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## DEDICATION

This paper is dedicated to my companion and friend, Sara Anderson. Without her continual help and the sacrifices she has made during the past five years I would have never been able to get where I am today.

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## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS .....	v
CHAPTER	
1 INTRODUCTION .....	1
2 LITERATURE REVIEW .....	5
Definition of the alliance .....	5
Differences in the alliance between individual and relational therapies .....	8
History of the alliance .....	11
The status of alliance theory in couple therapy .....	16
Research on the alliance in couple therapy .....	18
Recommendations for improving the alliance.....	29
Purpose of the present study.....	34
3 METHODS .....	35
Research questions .....	35
Participants .....	36
Measures.....	37
Procedure.....	40
Models .....	41
Planned analyses.....	45
4 RESULTS .....	51



Preliminary analyses.....	52
Analysis of simple actor-partner interdependence models.....	62
Analysis of complex actor-partner interdependence models .....	75
5 DISCUSSION .....	83
Summary of key findings .....	83
Other findings of interest to the study of the alliance .....	93
Clinical implications.....	95
Limitations.....	98
Future directions.....	100
Conclusion.....	102
REFERENCES .....	104
APPENDICES .....	116
A INSTRUMENTS.....	116
B IRB APPROVAL LETTERS.....	123

## CHAPTER 1

### Introduction

The effectiveness of psychotherapy in general and couple therapy in particular has been well-established in the literature (Shadish & Baldwin, 2003), yet we know very little regarding the change process. Do changes emerge as a result of specific factors unique to different models of therapy or are there common factors that operate across all models of therapy? While this question is currently being debated, there is a growing consensus that several common factors underlie all successful therapies (Wampold, 2001). At the heart of these common factors is the therapeutic alliance. The alliance refers to the collaborative nature of the relationship between clients and therapists and the affective bond they form with each other. Edward Bordin, whose pan-theoretical conceptualization of the alliance lays the groundwork for the majority of research on the alliance, proposed that the therapeutic alliance “between the person who seeks change and the one who offers to be a change agent is one of the keys if not *the* key, to the change process” (1979, p. 252). Likewise, others (Lambert, 1992) have suggested that the relationship between client and therapist may account for as much as 30% of the variance in therapy outcome. While these claims have led to an overwhelming level of research in individual therapy, the field of couple therapy has remained comparatively silent.

Research on the alliance has flourished in the field of individual psychotherapy resulting in multiple meta-analytic studies supporting the importance of the alliance (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000; Wampold, 2001). These studies have shown that the effect of the alliance on outcome is robust, holding true across studies using a range of instruments,

differing treatment models, different raters, a range of outcome measures, and regardless of whether the study was published or not (Horvath, 2001; Martin et al., 2000; Shirk & Karver, 2003). The concept of the alliance has expanded beyond the field of psychotherapy as well. It has been used in the medical and nursing fields to conceptualize the physician/patient relationship (Evon & Burns, 2004; Fuertes et al., 2007), career counseling (Multon, Ellis-Kalton, Heppner, & Gysbers, 2003), case management (Hopkins & Ramsundar, 2006), supervisor-supervisee relationships (Chen & Bernstein, 2000; Ladany, Ellis, & Friedlander, 1999) and the relationship between major advisor and student (Schlosser & Gelso, 2005).

In each of these applications however, the alliance has been examined in the context of a two-person relationship. Little has been done to conceptualize and research the alliance when three people are involved as they are in couple therapy. The addition of another client implies the existence of multiple alliances. In addition to the separate individual alliance each partner develops with the therapist, partners must also develop a therapeutic alliance with each other. The existence of multiple alliances limits the ability to generalize the vast research on the alliance in individual therapy to couple therapy. The concept of multiple alliances also provides many exciting clinical and research avenues to explore. For instance, what alliance is most important to the success of couple therapy? Are there differential effects for the alliance on outcome based on sex, readiness to change, attachment or other characteristics? How does a husband's alliance with the therapist impact his wife's outcome? Is the alliance between a husband and wife more important than the individual alliances they form with the therapist? This is a sampling of the richness of the dyadic questions that can be explored.

The ability to answer such questions, however, has been hampered by methodological and analytical problems. One of the primary assumptions of the analyses used in the social

sciences is that observations are independent from each other. This poses a problem to the research on the alliance in couple therapy. It is obvious that the marital satisfaction of a husband is strongly correlated with the marital satisfaction of his wife. The alliances partners have with the therapist are also non-independent. The research on the alliance in couple therapy has dealt with this non-independence by either ignoring it and violating the assumptions of the analytical strategies, or acknowledging it and running analyses separately for husbands and wives. This has severely limited the ability of researchers to examine the dyadic questions that are at the heart of the therapeutic alliance in couple therapy and differentiate this construct from the alliance in individual therapy.

In the past decade, there has been an effort on the part of methodologists to address issues of non-independence in dyadic data. These efforts have resulted in analytical models that allow researchers to study couples, families or other intimate groups, using couples rather than individuals as the unit of analysis (Kenny, Kashy, & Cook, 2006). The field of couple and family therapy, however, has been slow to adopt these new models in its research.

The purpose of the present study is to take the first step in understanding the alliance using the couple, rather than the individual, as the unit of analysis. Using the actor-partner interdependence model (Kenny et al., 2006) this research will examine to what extent the therapeutic alliance of one partner impacts changes in both his own level of distress as well as the distress of his partner. It will also examine whether there are differences in the strength of the association between alliance and outcome for husbands and wives. This study will also examine which alliance is most important in couple therapy. By addressing these dyadic questions for the first time, this research will greatly contribute to our understanding of the alliance in couple therapy.

This project will be organized into five chapters. In Chapter two, I will define the alliance while noting differences between the construct in individual and couple therapy, trace the development of this concept in individual therapy and its subsequent translation to couple therapy, review the research on this construct focusing primarily on literature relating to couple therapy, and suggest areas for the further development of the alliance as a common factor in couple therapy. Following this review, Chapter 3 will articulate the central research questions addressed in this study and outline the methods I will use to address these questions. Results will be presented in Chapter 4 and a discussion of these results, limitations of the study and direction for future research will be presented in Chapter 5.

## CHAPTER 2

### Literature Review

#### *Definition of the Alliance*

The therapeutic or working alliance is not synonymous with the therapist-client relationship. While the alliance falls under the broad umbrella of relationship factors, it refers to a specific aspect of the relationship. A number of research centers have discussed and conceptualized the alliance differently, with each developing their own measure and definition of the construct. In each of these different conceptualizations, however, the alliance has come to refer specifically to the collaborative partnership that a client and therapist develop against the presenting problem and the affective bond between the two (Horvath & Symonds, 1991). In the context of couple therapy, Pinsof has defined the alliance as, “those aspects of the relationships between and within the therapist and patient systems that pertain to their capacity to mutually invest in and collaborate on the tasks and goals of therapy” (1994, p. 176).

Pinsof’s definition of the alliance is based on the conceptualization offered by Bordin (1979). As nearly all of the theory and research on the alliance adopts this pan-theoretical model, I will elaborate on it focusing particularly on Pinsof’s (1994; Pinsof & Catherall, 1986) extension to couple and family therapy in which he proposed two dimensions of the alliance, the content dimension and the interpersonal dimension. When these two dimensions are crossed, the result is a 12-factor model of the therapy alliance that stands as the predominant operationalization of the alliance in couple therapy.

### *Content Dimension*

Bordin conceptualized the alliance as consisting of three components: a mutual agreement on the goals of therapy and the therapeutic tasks used to achieve them, as well as an affective bond between the client and therapist that would allow the work of therapy to occur. Pinsof and Catherall (1986) referred to these three components as the content dimension of the alliance. Pinsof (1994) has suggested that the relative importance of these components can change throughout the process of therapy. At the onset of therapy, most clients do not have a relationship with the therapist. Pinsof suggests that a strong early alliance can be formed by focusing on the goals and tasks of therapy. As therapy progresses and a bond between the therapist and client develops, therapists will have more latitude to offer unexpected tasks or tasks that are uncomfortable for the clients.

#### *Goals.*

The goals component of the alliance refers to the degree to which clients and therapist agree on and invest in the goals of therapy. Agreement on the goals of therapy forms the basis for the collaborative process of treatment. Bordin (1994) suggests that the negotiation of a common goal is key to the formation of the early alliance. This process is more difficult in couple therapy where partners can present with differing goals. When there are significant discrepancies between the goals of the couple and the goals of the therapist, or perhaps more importantly between the goals of each partner, the goals component of the alliance will be low.

#### *Tasks.*

The tasks component of the alliance refers to the degree to which clients and therapist agree on the major activities that they will engage in during treatment. It is weakest when clients

perceive that the tasks of therapy do not relate to their problems (e.g. a structural therapist assigns a couple the task of going on more dates to alleviate their symptom-bearing child's conduct problems). Pinsof expanded upon this definition in two ways. First, he broadened it by including the client's belief in the therapist and his/her methods(1986). He further broadened the tasks component to include the level of anxiety that members of the therapist and patient systems experience as they engage in the tasks of therapy.

### *Bonds.*

The bonds component of the alliance centers on the quality of the affective relationship between therapist and clients. It reflects the degree to which members of the couple “trust, respect, care about, and feel cared about by the therapist and the therapist system” (Pinsof, 1994, p. 183). Bordin(1979) states that the level of bonding required is dependent on the goals and tasks of therapy. For example, the level of bonding necessary to engage in the long-term task of self-differentiation in Bowen therapy requires a different bond than the bond required in an eight-session course of brief solution-focused therapy. A high level of bonding provides a safe environment that allows clients to engage in therapeutic tasks that may be anxiety producing or contrary to those expected by the couple.

### *Interpersonal Dimension*

Pinsof and Catherall's (1986) introduction of the interpersonal dimension of the therapy alliance and the development of instruments to measure these dimensions have been their most significant contribution to the study of the alliance. Pinsof conceptualizes therapy as an activity that takes place between two systems. The patient system contains all of the individuals and systems that are part of the creation, maintenance and resolution of the presenting problem (Pinsof, 1994). This system extends beyond the individual, couple or family that presents for



treatment in the therapy room to include extended family, and other systems that may become involved such as the school system. The therapist system encompasses those individuals and systems involved in the treatment of the patient system. This system can include supervisors, therapy teams behind a one-way mirror, case consultants, as well as receptionists and secretaries. The interpersonal dimension addresses the levels (individual, interpersonal subsystem, and whole system) and the loci (between-systems and within-system) at which an alliance can exist.

The individual, interpersonal subsystem, and whole system alliance are all levels of alliance between the patient and therapist system. The individual alliance level of this dimension pertains to alliances between individual members of the client system and the therapist system and is equivalent to Bordin's tripartite model of the alliance. The interpersonal subsystem alliance pertains to alliances between subsystems of the patient and therapist systems. The whole system alliance refers to the alliance that exists between the patient and therapist systems and contains all of the members of at least one of these systems. The within system alliance is not a separate level of alliance but merely a different locus. The within system alliance pertains to the alliance that exists between individuals or subsystems within the same system. Others have referred to this alliance between partners as the allegiance (Symonds & Horvath, 2004) or shared sense of purpose within the family (Friedlander, Escudero, & Heatherington, 2006).

#### *Differences in the Alliance Between Individual and Relational Therapies*

Translating the alliance from individual to relational therapy is anything but straightforward due to the inherent differences between the two therapies. The primary difference is the most obvious; there are more people in the room. Rait (1995; 2000) and Patalano (1997) discuss several reasons this may impact the working alliance. These reasons include multiple between-systems alliances, the within system alliance, differences in safety,

increased decision points and the influence of systemic forces on the formation and maintenance of the alliance.

First, increased number of participants leads to multiple between-systems alliances (Rait, 1995, 2000). Each partner may have a different level of motivation for change, different goals for therapy, or different expectations of what tasks need to be accomplished. Take, for example, a couple in which the wife's complaint is a lack of communication in the relationship and the husband's is dissatisfaction with the sexual relationship. Each believes his or her goal should be the focus of treatment and each has punctuated the interaction to focus the blame on the other. The husband may punctuate the relationship by stating that his distance from his wife is caused by her coldness toward him in bed. The wife punctuates the situation as his distance leading to her coldness in bed. The therapist sees an interactional cycle maintained by a negative feedback loop. Arriving at a mutually agreed upon goal, remaining neutral, and simultaneously connecting at an affective level with each emotionally charged partner is a difficult balance for any therapist. The potential for tears in the alliance or for forming alliances of differing strengths with each partner is evident as a therapist tries to negotiate this first stage of treatment.

Not only does the therapist need to be concerned with monitoring these between-systems alliances, he or she also needs to monitor the alliance within the couple as well. Individual therapy relies on the relationship between client and therapist to effect change. While the between-systems alliance is important in couple therapy as well, it is the relationship between partners that is seen as the mechanism for change in systemic therapies.

A third consequence of introducing multiple clients into the therapy system is that the words spoken between a partner and therapist are never confidential (Friedlander, Escudero, & Heatherington, 2006). They are witnessed by the other partner. The concept of safety is

particularly salient in couple therapy where the consequences for saying the wrong thing are great. Disclosure of an affair, thoughts of separation, acknowledging domestic violence or simply disclosing how much your partner has hurt you emotionally all have real ramifications that continue long after the couple leaves the therapy room. In a qualitative study of the change process, Christensen and colleagues (Christensen, Russell, Miller, & Peterson, 1998) note that the first precondition for change in therapy mentioned by each partner was a sense of safety. In another study the authors note that sense of safety varies depending on which family members attended the therapy session (Beck, Friedlander, & Escudero, 2006). Furthermore, partners may differ in the level of safety they feel in the therapy room, such as in cases of abuse. The voice of the partner or other family members and not the therapist is often the most important voice in couple therapy. Alliances in couple therapy need to be strong enough to create the safety needed for change to occur.

Multiple alliances lead to more noise, more conflict, and more decision points for a therapist (Rait, 2000). A few years ago, a husband and wife I was working with had a heated exchange in session ending in the husband storming out of my office. If this had happened in individual therapy, I would have been concerned only with repairing the rupture in the alliance between the husband and me. As a couple therapist I need to concern myself with the following questions: (a) which alliances were ruptured during the exchange? Was it my alliance with the husband, the wife, the couple system, or the alliance between husband and wife? (b) What alliance is most important for continuance in therapy? (c) Should I remain in the session to rebuild the alliance between the wife and myself or risk further rupturing that alliance to repair an alliance with the husband? (d) How do I handle the inevitable invitation for triangulation that will occur as the wife apologizes for and complains about her husband? While an extreme

example, couple therapists are confronted with similar smaller decisions regarding the alliance throughout each session.

Finally, Rait (2000) points out that when multiple clients are seen in the same room, the therapist will be subject to the homeostatic forces in the family system that will exert pressure on the therapist to conform to the system. Triangulation, used in the example above, is only one of the many ways that these homeostatic forces may influence alliances in couple therapy. These systemic forces, the multiple decision points, safety, and the multiple between and within systems alliances that are an inevitable part of couple therapy lead to inherent differences between the alliance in individual and couple therapy. These differences make both the clinical and research findings of individual therapy difficult to translate into couple therapy.

### *History of the Alliance*

Pinsof's extension of the alliance to couple therapy was not the first redefining of the alliance. While the focus of this paper is on the alliance in couple therapy, it seems befitting to situate the alliance in the larger context of its development within individual therapy where its history is long and rich. To cover this history in its entirety is beyond the scope of this paper. What follows is a brief summary of the development of the alliance including the introduction of the concept in psychoanalysis, the therapist client relationship in the work of Carl Rogers, the development of a pan-theoretical model of the alliance and the transition of the alliance from individual to relational therapy.

The therapeutic alliance traces its roots to Freud who laid the groundwork for the construct in his work to resolve a theoretical dilemma. Freud believed that transference led to both a client's motivation and cooperation in treatment as well as his resistance to treatment (Abend, 2000; Dykeman, 1995). To resolve this contradiction Freud postulated that there is a

division between the positive and negative or neurotic components of transference. Freud believed that the identification of the therapist with other positive objects from the past led to feelings of friendliness and warmth toward the analyst and provided a partnership needed to engage in the difficult work of analysis (Abend, 2000; Horvath, 2000; Horvath & Symonds, 1991). Two points are important. First, this transferential relationship is not “real” in the sense that it is not a relationship with the analyst per se but rather with the other positive authoritative figures from the past that are projected onto the analyst. Second, this positive transference merely establishes a context for the curative analysis of the neurosis. It is not curative in and of itself (Horvath, 2000).

Freud’s initial conceptualizations were extended and modified by other psychoanalytic scholars in the ensuing decades. These scholars include Richard Sterba (1934) who introduced the term alliance to the literature in describing it as a relationship with a client’s dissociated ego; Elizabeth Zetzel (1956), who coined the term “therapeutic alliance”; and Ralph Greenson (1965) who introduced the term “working alliance” and defined it as “the nonneurotic, rational, reasonable rapport which the patient has with his analyst and which enables him to work purposefully in the analytic situation despite his transference impulses” (Greenson & Wexler, 1969, p. 29). Greenson was particularly influential in shifting thought away from a purely transferential definition of the alliance. In each of these iterations of the alliance, the focus was on the client’s contribution to the alliance, with the therapist acting as the object of the alliance rather than a joint collaborator.

These psychoanalytic conceptualizations of the alliance and early behaviorism’s rejection of the importance of this construct dominated thinking regarding the alliance until the early 1950’s when Carl Rogers made three propositions that placed the real, non-transferential

relationship between client and therapist into the spotlight (Dykeman, 1995; Horvath, 2000; Rogers, 1951). First, he proposed that positive relationship qualities offered by therapists such as unconditional positive regard are curative in and of themselves. Second, Rogers believed that these relational factors lead to change in all models of therapy. Finally, Rogers shifted the focus from the client's role in the creation of the alliance to the importance of the therapist in creating this relationship. In Roger's outline of what he considered six necessary and sufficient conditions for change in therapy, the only client condition noted was that the client is "in a state of incongruence, being vulnerable or anxious" (Rogers, 1957, p. 96). The remaining five conditions all relate to the therapist. The therapist is responsible for producing the conditions necessary for change. The therapist's offerings of unconditional positive regard, empathy, and congruence are interventions that activate the client's innate tendency toward growth and actualization (Rogers, 1957). Rogers' work led to a period of high productivity in research on the relationship between therapist and client based largely on his client-centered model.

The next development of import regards the extension of the alliance beyond specific theoretical orientations. In an address given to the Society for Psychotherapy in 1975, Edward Bordin proposed a pan-theoretical model of the alliance that has provided the basis for a large portion of the thought and research on the alliance for the past 30 years. Like Rogers, Bordin proposed that the working alliance is germane to all therapies. However, Bordin's conceptualization differs from Roger's in the nature of the client-therapist relationship. Both Rogers and Bordin see the client as an active agent in the change process, however while Rogers highlighted the importance of the therapist providing the context for the client to grow, Bordin highlighted the collaboration between client and therapist. In this way, Bordin's conceptualization can be seen as an integration of Roger's focus on the therapist's contribution to

the alliance and the psychoanalytic focus on the client's contribution. He described a strong alliance as one in which the therapist can help foster change, "without reducing the partnership to the pairing of a leader-therapist with an assistant-patient" (1994, p. 15). Bordin proposed that all forms of psychotherapy contain a working alliance and that, "the effectiveness of a therapy is a function in part, if not entirely, on the strength of the working alliance" (1979, p. 253).

Despite Bordin's proposal that the alliance is a common factor in all forms of therapy, the field of marriage and family therapy appeared not to be listening. The working alliance was barely mentioned prior to 1986, and when it was, it was generally influenced by the classical psychoanalytic conceptualization rather than Bordin's formulation (for examples see Goldberg, 1974; Rutan & Smith, 1985; Shapiro, Shapiro, Zinner, & Berkowitz, 1977; Solomon, 1977). The first study measuring the alliance in couple therapy did not appear until a full decade after Bordin's original formulation of the alliance and was only used to demonstrate the equivalence of treatment groups rather than as the study's focus (S. M. Johnson & Greenberg, 1985).

More than thirty years after the birth of family therapy, the importance of the relationship between client and therapist had yet to be articulated in MFT theory and research. It was not until 1986 that an adaptation of Bordin's model was formally introduced to the field of family therapy (Catherall & Pinsof, 1987; Pinsof & Catherall, 1986). Pinsof and Catherall's extension of Bordin's model has provided the sole basis for research on the alliance in relational therapy until recently when Friedlander, Heatherington and others (Friedlander, Escudero, & Heatherington, 2006; Friedlander, Escudero, Horvath et al., 2006) proposed a similar trans-theoretical model of the alliance. Their model is similar to Pinsof's and focuses on engagement in therapy, which parallels the goals and tasks aspect of the alliance and an emotional connection to the therapist, which is analogous to bonds. To capture the uniqueness of couple and family therapy they also

proposed a safety in the system dimension, which Pinsof placed under the bonds dimension, and a dimension to capture the family's shared sense of purpose, analogous to the within-systems alliance in Pinsof's operationalization. Their work, including a system of observational and self-report measures of the alliance, will likely stimulate further research on the alliance in couple therapy.

While this recent interest in the alliance is encouraging, the question remains as to why the alliance was neglected in MFT theory and research for the first three decades of its existence. Several authors have suggested reasons for this delay including the primacy of the couple relationship over the therapist-client relationship, the historical context of the birth and differentiation of MFT from individual therapy, and a focus on modernist first-order cybernetics. Gurman (2001) suggested that MFT models of intervention are by and large brief therapies. As such, there is a similarity in the belief that the relationship between family members is more curative than the relationship between therapist and family members. MFT has developed its niche through the elaboration of models, techniques, and interventions targeting the relationship between partners rather than the relationship between client and therapist.

This extensive focus on intervening at the systemic level was necessary to distinguish MFT as a profession. Sprenkle and Blow (2004) discuss the historical context of family therapy as a hindrance to a focus on common factors, including the alliance. They point to three elements in particular that led the fledgling field to focus on distinctions rather than commonalities. First, there was intense pressure to differentiate relational therapy from individual psychotherapy. The early years of MFT coincided with the expansion of Rogers' client-centered therapy. A focus on technique and systems theory rather than on the relationship helped distinguish MFT from psychology. Second, competition among early models to establish the superiority of one model



over another and the accompanying zeal of those ascribing to those models led to a focus on the distinctions between these models. Third, the cognitive dissonance associated with admitting that the model that you have so much invested in is no better than any other, led to a continued focus on distinctions rather than the alliance that was common to all models. In the words of Frank, “Little glory derives from showing that the particular method one has mastered with such effort may be indistinguishable from other methods in its effects” (p. 47).

Flaskas (2004) notes that the recent focus on the alliance is associated with three important developments in the field of MFT that led it away from a modern first order cybernetic model. First, by the early 1980’s the shift from first to second-order cybernetics was influencing the field. This shift invited therapists to consider how they are influenced by the system and how their position in the system influences the way they both see and are seen by the family. Second, the feminist critique of family therapy legitimized a focus on the affective domain of relationships. Finally, a shift from the modern view of the therapist as the expert to the collaborative, social-constructionism of post-modernism paved the way for a focus on the relationship between therapist and client in the field. This can be seen in the emphasis on the alliance in the newer clinical models such as Emotionally Focused Therapy (S. M. Johnson, 1996), Multi-dimensional Family Therapy (Liddle, 2002), and Integrative Cognitive Behavioral Therapy (Jacobson & Christensen, 1996).

### *The Status of Alliance Theory in Couple Therapy*

While the emphasis on the alliance in these newer clinical models is encouraging, these models, with the exception of Multi-dimensional Family Therapy, have merely paid lip service to the alliance, not offering a conceptual model of how alliance might relate to improvement. This lack of a conceptual model or a larger theoretical framework in which to situate the alliance

is a challenge confronting the study of the therapy alliance in couple therapy. The term theory is used cautiously here to describe the concept of the alliance. Doherty and associates (Doherty, Boss, LaRossa, Schumm, & Steinmetz, 1993) define theory as “a process and a product: Theorizing is the process of systematically formulating and organizing ideas to understand a particular phenomenon. A theory is the set of interconnected ideas that emerge from this process” (p.20). These authors go on to offer a typology of theory based on the level of abstraction and the scope ranging from empirical generalizations, low on abstraction and narrow in scope, to metatheories with high levels of abstraction and broad in scope. Currently, theorizing and research on the alliance falls somewhere between what Doherty and his associates refer to as “empirical generalizations” and “causal models”. They describe empirical generalizations as “research findings that are linked to other research findings and to some more general ideas about the research topic”, but lack a connection to “an overarching theoretical scheme” (p20). Causal models on the other hand, are “more complex empirical generalizations...presented as models to be tested in a study, not just as summaries of research findings” (pp 20-21).

To date, the theorizing of Pinsof (1992; 1994; Pinsof & Catherall, 1986) has generated only a sketch of a causal model for the phenomenon. He has proposed that the alliance influences outcome and that alliances of family members interact in a circular and reciprocal fashion with the alliance of each family member influencing the outcome of every other member. He has also suggested that the salience of the three content domains of the alliance will vary across time. Pinsof has also discussed the influence of split alliances. Other than these general propositions, little has been done to articulate a more detailed causal model to explain the formation of the alliance and the paths through which it influences outcome.

Research, ideally, is grounded in theory with results providing feedback to modify or support the theory being examined. The research into the alliance in couple therapy has begun testing Pinsof's propositions but because no clear conceptual model has been articulated, the results of these studies have done little to feedback into and modify the conceptualization of the alliance. The lack of a conceptual model does not mean that research cannot or should not be conducted. Research can provide evidence for or against the general propositions Pinsof has articulated. As results from different studies emerge, differences in the findings will generate discussions among those interested in the alliance and spur further theorizing. As the concept of the alliance is discussed in the literature, a more detailed conceptual model is likely to emerge.

### *Research on the Alliance in Couple Therapy*

This process appears to be underway. In the past few years, there has been a focus on the client-therapist relationship in the clinical literature. There has also been an increase in the frequency of research on the alliance in couple therapy. However, when compared to the vast amount of literature generated on the alliance in individual therapy it is clear that alliance research in couple therapy is still in its infancy. While the multiple reviews of the alliance research in individual therapy (for an excellent example see Beutler et al., 2004) may serve as a useful starting point for alliance research in couple therapy, direct translation of this research from individual therapy to couple therapy is problematic (L. N. Johnson & Wright, 2002). In addition to the conceptual differences created by the introduction of multiple alliances, the dyadic nature of the data leads to non-independent data that further complicates analysis. The following review will survey the couple therapy literature documenting the relationship between alliance and outcome, as well as research on sex differences in the alliance, split alliances, and the within system alliance

### *Alliance and Outcome in Couple Therapy*

When couples have been asked to partition the impact of four common factors on their change in therapy, they attribute 26% of change to the therapeutic relationship (M. L. Thomas, 2006). Actual percent of variance explained varies from study to study with some finding an even greater proportion of variance explained by the alliance while others report no relationship between alliance and outcome. As will be seen, the link between alliance and outcome is encouraging but plagued by inconsistent results. The outcomes that have been examined include early termination, marital satisfaction, alcohol use, individual psychological distress, the quality of the session, and client's perception of improvement in therapy.

#### *Early termination.*

The connection between quality of the alliance and early termination from couple therapy has generally been supported by the literature. Three studies have explicitly examined the hypothesis that lower levels of alliance are associated with premature termination. In the first of these studies, Raytek and his colleagues (1999) examined dropout in the conjoint treatment of 90 couples in which the male partner was abusing alcohol. Alliance, as measured by observers' ratings of therapist behavior items during a 15-minute segment of the first session, was significantly associated with dropout and with the number of sessions attended by couples. In further exploration, these authors also found that alliance accounted for more variance in dropout than did therapist level of experience. This finding suggests that the relationship between therapist experience and outcome is mediated by the quality of the therapeutic alliance. It is important to note, however, that only therapist alliance behaviors were measured in this study. Neither client alliance behaviors nor therapist client interaction were coded, calling into question the adequacy of the construct. Using a similar sample of outpatient couples presenting for

common concerns such as communication and intimacy, the results of another study support the findings of Raytek and associates (Knobloch-Fedders, Pinsof, & Mann, 2004). The authors found that the 80 individuals who completed at least eight sessions scored significantly higher on the Couple Therapy Alliance Scale, compared to 88 individuals who dropped out prior to the eighth session. Drop-out and completer groups did not differ on any demographic variables other than race, with more Blacks dropping out of therapy. These results must be viewed cautiously as the non-independence of couple data was ignored. Ignoring non-independence can lead to increased Type I errors when partner's scores are highly correlated (Kenny, 1996).

In contrast to the previous two studies mentioned, Brown and O'Leary (2000) examined early termination in the context of a group treatment for spousal abuse and found no significant effect for alliance on drop-out. Early termination was operationalized as less than 70% attendance at group sessions. This study differs from the previous ones in three important ways. First, couples were recruited from newspaper advertisements and received sessions for free. The alliance may be important in continuation of therapy only when there is no financial disincentive for continuation. Second, while the focus of this therapy was on couples, this focus occurred in the context of a multi-couple group or sex-specific groups rather than traditional conjoint therapy. Third, this study controlled for other variables such as pre-treatment levels of abuse and marital satisfaction. It is possible that the variance in dropout explained in the previous studies would be better accounted for by other pre-treatment variables. The authors also set a relatively liberal dropout criterion. It is possible that higher alliance scores for those dropping out later in treatment masked the potentially lower alliances of those dropping out earlier. While these three studies represent an important step in determining the relationship between the alliance and early termination, further work is needed. Each of these studies was conducted with demographically

similar samples. Participants in each of these studies were primarily Caucasian, middle-class, and in their mid 30's. Replication is needed with diverse groups controlling for possible pre-treatment covariates such as relational and individual distress.

#### *Marital satisfaction.*

Several studies have examined the relationship between alliance measured early in treatment and levels of marital satisfaction at termination. These studies have varied in their quality with some controlling for pre-test levels of marital satisfaction while others report a simple correlation. Studies have also varied in the size of the sample, influencing their power to detect significant results. These studies have also presented conflicting results on the impact of the alliance on marital distress at termination. The most encouraging results have come from a study of the predictors of successful couple therapy. S.M. Johnson and Talitman (1997) reported that couple mean scores on the CTAS accounted for 23% of the variance in levels of marital satisfaction at termination and 29% at follow-up when controlling for pretest levels of satisfaction. The relationship between alliance and levels of intimacy at termination and follow-up were also significant although lower, explaining 10% and 16% of the variance respectively. Similar, though more modest, results were reported for the relationship between early alliance and mean level of marital satisfaction in group marital therapy (Bourgeois, Sabourin, & Wright, 1990). While Raytek and colleagues (1999) found that the observer-rated alliance was predictive of drop-out, they found that the same relationship did not hold true for post-treatment measures of marital happiness or to percent of days abstinent from alcohol. It is possible that the lack of hypothesized results could be due to the previously discussed limitations of the alliance measure used by Raytek. Symonds and Horvath (2004) measured the alliance from the client and therapist's viewpoint and found conflicting results depending on the measure used. They found

no significant relationship between alliance at session three and marital satisfaction at termination when alliance was measured by the clients. However, therapist rated alliance, particularly the task and goals subscales, was correlated with marital satisfaction at termination for both husbands and wives when controlling for pre-test levels of satisfaction. Holtzworth-Munroe and colleagues (Holtzworth-Munroe, Jacobson, DeKlyen, & Whisman, 1989) also found that clients who are actively and collaboratively involved in the early stage of therapy, a reflection of the agreement on the tasks and goals of therapy, are also more likely to experience greater marital satisfaction at the end of treatment. The tasks component of the alliance was also the most important in EFT, accounting for 27% of the variance in satisfaction at termination and 36% at follow-up (S. M. Johnson & Talitman, 1997). The consistent relationship between agreement on the tasks and goals of therapy across differing clinical models of therapy lends credence to Wampold's (2001) observation that there is little evidence that the beneficial results of therapy can be attributed to the specific ingredients of the various models. Instead, he concludes, it is a therapist's ability to present the goals and tasks of therapy in a way that makes them meaningful for the client that leads to successful outcome.

#### *Individual Distress.*

Only one study has examined the impact of the therapy alliance in couple therapy on individual distress. Knobloch-Fedders, Pinsof and Mann (2007) examined the association between first and eighth session alliance on individual symptom distress among 80 individuals seeking couple therapy. Distress was assessed using a 33-item measure designed to assess for common DSM IV diagnoses. Hierarchical linear regression models were run separately for men and women with pretreatment levels of individual functioning entered on the first step followed by first session therapeutic alliance scores on the second step. A separate hierarchical regression

was conducted using eighth session therapeutic alliance scores. Neither the first session nor the eighth session therapy alliance was significantly associated with individual functioning for husbands or wives. Further research is needed to replicate this finding.

*Immediate session outcome.*

Three studies have examined the relationship between the alliance and immediate session outcome. Heatherington and Friedlander (1990), in a small sample of 16 couples, found that couples' mean level of alliance on the tasks dimension of the CTAS was moderately correlated with clients' perceptions of the depth and value of the session. Correlations between all subscales of the alliance except bonds were moderately but not significantly correlated with client ratings of the depth and smoothness of the session. In a similar sample of 17 clients, Coupland and Serovich (1999) found further evidence for the association between the tasks component of the alliance and perceived depth of the session. However, in each of these studies both measures were administered following the session and completed by the same rater. Due to this design limitation, correlations between the alliance and session quality can easily be attributed to a halo effect. In a similar study that used an observer-rated alliance measure to control for the halo effect and a larger sample of couples, the authors found that both husbands and wives who were rated as being engaged in the therapy session (i.e. high on bonds and goals) were also likely to report that the session was deeper and more valuable. Men, but not women, who were rated as experiencing higher degrees of emotional connection with the therapist were also more likely to report greater session depth. Only observer's ratings of the within system alliance, or shared sense of purpose, were correlated with the perceived smoothness and ease of the session (Friedlander, Escudero, Horvath et al., 2006). Taken together, these studies demonstrate that there is a relationship between the perceived value of the session and the tasks aspect of the



alliance. These results are not surprising given that higher scores on tasks represents a greater perception that the tasks of therapy are meaningful to the client. Rather than an association between alliance and session outcome, this result might be better used to establish the construct validity of the tasks/engagement subscales of the measure of the alliance used in these studies.

#### *Summary.*

As the above review demonstrates, the relationship between alliance and outcome in couple therapy is similar to that of individual therapy. However, this relationship is still tentative as inconsistent results emerge across studies. While further replication is needed, it is encouraging to see correlations between alliance and outcome across several intervention models including EFT, BMT, and a generic therapy model. Results have been replicated using different instruments and with different raters, and in three countries, US, Spain and Canada. Despite these optimistic findings, there is considerable work to do given the inconsistencies in nearly every outcome studied.

#### *Sex, Split-Alliances and Within System Alliance*

Research on sex difference in the alliance, split-alliances and the within system alliance are of particular interest. It is in these areas that couple therapy research has moved beyond individual therapy research to begin addressing our unique conceptualization of the alliance. While the research in these areas is relatively meager, these results are laying the groundwork for future research.

#### *Sex.*

Some authors (Knobloch-Fedders et al., 2007) have suggested that it is unreasonable to assume that the formation and maintenance of the alliance is identical for women and men in couple therapy. Men may be at a disadvantage in therapy as the relational focus and language of

therapy is more congruent with women's socialization (Friedlander, Escudero, & Heatherington, 2006). Men may also be more reluctant to participate in therapy due to socialized avoidance of help-seeking behaviors (Bringle & Byers, 1997; Sheu & Sedlacek, 2004). These differences lead to questions regarding the impact of sex on the formation of the alliance. Furthermore, in working with a heterosexual couple, unless a co-therapist is included, there will always exist a match in sex between the therapist and one client and a mismatch with the other.

While limited in number and detail, research has begun to offer tentative suggestions on the impact sex has on the relationship between the alliance and outcome. Symonds and Horvath (2004) have suggested that sex may moderate the relationship between alliance and outcome. They found that when the male partner's alliance score was higher than that of his partner, the alliance was significantly positively related to marital satisfaction. This relationship between alliance and satisfaction was absent when the female partner's alliance score was higher. Furthermore, they found that when the alliance for men improved from first to third session or when both partners improved, there was a significant correlation between therapist rated alliance and the husband's marital satisfaction score. No such findings were true for the female partners. Bourgeois, Saborin and Wright (Bourgeois et al., 1990) also found evidence to support differential effects of alliance on outcome for men and women. They too reported that the husband's alliance tends to be a better predictor of outcome than the wife's, however, I must note that this is an observation that was not tested statistically. In contrast to these findings, Quinn, Dotson, and Jordan (1997) noted the opposite effect. They reported that when wives had higher alliances than their husbands did on the tasks subscale or on the other-therapist subscale there were higher correlations with self-reported goal attainment. Furthermore, they noted that while the alliance was associated with outcome for both husbands and wives, the correlations between

alliance and outcome were stronger for wives. Again, this declaration of the relative strength in the correlation between alliance and outcome is offered without statistical justification. While replication is needed to iron out the inconsistencies, these early studies tentatively suggest that when men are drawn into therapy through a strong working alliance, the chance for improved outcome is enhanced.

In light of this tentative finding, therapists may want to pay particular attention to developing an alliance with men in therapy. The limited research on alliance formation gives one suggestion of how to accomplish this. One particularly deleterious behavior to the formation of the alliance with husbands is partner negativity. Research on the development of the alliance suggests that partner negativity in session is inversely correlated with the development of husbands' but not wives' alliances (S. E. G. Thomas, Werner-Wilson, & Murphy, 2005).

Sex match has been suggested as an important variable to consider in the formation of the alliance with both men and women (Garfield, 2004). While some research from individual therapy has supported the hypothesis that greater alliances will be formed in sex-matched clients (Wintersteen, Mensinger, & Diamond, 2005), these results cannot be transported to couple therapy. Client-therapist sex match has been investigated by only one study that found no relation between match and outcome (Symonds & Horvath, 2004).

#### *Split alliances.*

Pinsof (1994; 1986) suggested that because of sex differences, differences in goals, motivation and other factors, split alliances would occur frequently in therapy. Split alliances occur when one partner has a stronger alliance with the therapist than the other does. Pinsof (1994) proposed that the impact of a split alliance on outcome would be attenuated by two factors: a) the intensity of the negative alliance compared to the intensity of the positive alliance

and b) the relative strength of the sub-system with whom the positive alliance has been developed. He suggested that when these inevitable splits are not able to be resolved it is important to maintain an alliance with the individual or subsystem that has the most power to keep the family involved in treatment. Research regarding split alliances has demonstrated that they are common in couple therapy. Using a one standard deviation difference between partners' scores to define a split alliance, several researchers have indicated that these splits occur in between 32% and 43% of couples (Heatherington & Friedlander, 1990; Knobloch-Fedders et al., 2004; Mamodhoussen, Wright, Tremblay, & Poitras-Wright, 2005). Furthermore, it appears that splits are more common as therapy progresses (Knobloch-Fedders et al., 2004). It is unclear how these split alliances relate to the outcome of therapy. Couples have articulated fairness as a precondition to change. Therapists are expected to understand each partner's perspective and to avoid coalitions or permanent alignments with one partner (Christensen et al., 1998). Consistent with Pinsof's model, this would suggest that these split alliances would be related to negative outcomes. Further research is needed, however, to test this hypothesis and to test Pinsof's proposed moderators of its impact on outcome.

*Allegiance or within system alliance.*

Among elements that differentiate individual therapy from couple therapy is the pre-existing relationship between partners that is the vehicle for treatment in relational therapies. The agreement partners have about the goals and tasks of therapy and the affective bond they bring to the therapy and further develop as therapy progresses may be more important to the success of treatment than the alliance formed with the therapist. Recently, Knobloch-Fedders, Pinsof and Mann (2007) provided evidence to support the importance of the within system alliance. They found that when controlling for the effects of pretreatment marital distress as well as the bonds,

goals and tasks subscales of the alliance, the within system alliance was the only significant predictor of eighth session distress. Further evidence for the importance of the within system alliance has been presented by Symonds and Horvath's (2004). In their examination of the relationship between alliance and outcome, they suggest that the relationship between the two is moderated by the within system alliance, or what they termed the allegiance. Their preliminary findings suggest that when couples view the alliance similarly there is a significant correlation between alliance and outcome. However, when the couple disagrees on the strength of the alliance, they found a negative, though non-significant, relationship between alliance and outcome.

Studies from the alliance in family therapy literature corroborate these findings. In a qualitative analysis of three families, Beck and associates noted that the within systems alliance appears to be particularly salient (Beck et al., 2006). Of particular note is the authors' conclusion that the within systems alliance is more important than the alliance between systems in establishing a sense of safety. Clients consistently describe safety as a significant contributor to change in therapy (Christensen et al., 1998). What partners say in therapy can lead to a sense of safety and collaboration or to an atmosphere that is counterproductive. Two recent process studies found that changes in marital sentiment and emotional connection occur most frequently when one's partner is speaking to the therapist. This is particularly true for negative changes in marital sentiment (Anderson, Johnson, Childs, & Ketring, 2005; Anderson, Templeton, Johnson, Childs, & Peterson, 2006). Relative to the formation of the alliance in couple therapy, early evidence suggests that this is particularly true for men, whose alliance was significantly decreased by negative statements from their wives (S. E. G. Thomas et al., 2005). Thomas and colleagues also noted that when one's partner self-discloses in therapy, the bonds aspect of the

alliance is strengthened. While this refers to the bond between client and therapist, it is likely a reflection of an increased bond between partners. Collectively, these studies highlight the importance of fostering a collaborative relationship and give preliminary suggestions on how to do so. This aspect of the alliance in therapy seems to be a particularly fruitful area for further research.

### *Recommendations for Improving the Conceptualization and Research of the Alliance*

Couple therapy has begun to establish a history of research on the alliance. The recent publication of a book devoted to the alliance in couple and family therapy (Friedlander, Escudero, & Heatherington, 2006), the focus on the alliance in significant articles in the Journal of Marital and Family Therapy, a plenary address at the 2006 AAMFT conference (Sprenkle & Blow, 2004), as well as a focus on the alliance in recent empirically supported models of therapy are all signs that the alliance is coming of age in the field of marriage and family therapy. This has come at a time when individual therapy has questioned whether the concept of the alliance has outlived its usefulness (Safran & Muran, 2006). While Safran and Muran argue that the answer to this question is an emphatic no, alliance research in couple therapy can benefit from some of the lessons they have learned in considering this question. Based on lessons from individual therapy and my own observations of the alliance literature in couple therapy I will offer five recommendations to improve alliance research and theory in couple therapy. First, researchers should begin using analytic techniques designed for dyadic data. Second, process research should be employed to examine the formation of the alliance. Third, a conceptual model of how alliance is related to outcome should be developed. Fourth, in studies of the alliance, the selection of variables should arise from theory rather than convenience, and fifth, measures of the alliance should undergo rigorous investigation and improvement.

In recent reviews, Heatherington, Friedlander, and Greenberg (2005) as well as Snyder, Castellani and Whisman (2006), have pointed to the need for research that takes into account the dyadic nature of couple data. With one exception from family therapy (L. N. Johnson & Ketring, 2006), research on the alliance in couple and family therapy has treated the individual as the unit of analysis. This is problematic for two reasons. First, if non-independence of data is ignored, there is a risk for increased Type I or Type II errors (Kenny et al., 2006). Because alliance between partners is generally positively correlated at high levels, this most often results in an increase in the Type I error rate. What this means practically is that when the non-independence of data is ignored there is a tendency to say there is a relationship between variables when in reality no such relationship exists. Luckily, the majority of studies in couple therapy have recognized this, thus avoiding the first problem associated with not accounting for dyadic data. Various studies have avoided this in different ways including using only therapist behaviors to measure the alliance, thus avoiding the collection of data from each spouse, analyzing data separately by sex, and creating mean scores. Creation of a mean couple score on the alliance is problematic. Using such a score would equate a couple in which the husband reports very high levels of alliance and the wife reports very low levels of alliance with another couple in which both partners report moderate alliances. This has led methodologists to proclaim that, “summed or averaged scores may well create a *mis*-measure of the dyad” (Cook & Kenny, 2005, p. 102).

While the researchers have avoided the problem of non-independence by creating mean scores, conducting separate analyses, or examining information from only one source, in doing so they have not avoided the second problem associated with using individual rather than dyadic data: the inability to adequately measure dyadic constructs. Researchers have generally treated non-independence as a nuisance, however, as Kenny and colleagues (2006) point out, non-

independence between data from partners contains valuable information that is at the heart of research with intimate dyads. The key propositions Pinsof makes regarding the alliance are contained in this non-independence. For example, does a husband's alliance influence his wife's outcome as well as his own? Is the relationship between alliance and outcome stronger for wives than it is for husbands? Is the result of a split alliance mediated or moderated by whom the stronger alliance is with? Such questions lie at the core of the alliance in couple therapy and can only be addressed using dyadic data.

The second suggestion for improving alliance research and theory comes as a lesson learned from individual therapy. Safran and Muran (1996; 2006) have noted that research on the alliance has been hampered by a focus on the predictive validity of the alliance. They recommend a focus on process research examining the formation of the alliance. Knowing that the alliance at session one predicts outcome three months later is beneficial but does not provide therapists with a map of how to establish an alliance. Process research at the micro-level can provide such a map to therapists. This research has been undertaken in individual therapy in the study of alliance ruptures (Safran & Muran, 1996) as well as in family therapy (Sexton, Hembre, & Kvarme, 1996). Such research will be useful both in terms of clinical application and in terms of further articulation of alliance theory.

The further articulation of alliance theory in couple therapy is the third recommendation for improving alliance theory and research. This can be accomplished by articulating a conceptual change model and using consistent language and constructs and avoiding the creation of multiple variants of the same alliance measure. Alliance theory in couple therapy is silent regarding the path from alliance to outcome. The articulation of this path is essential to the testing and refinement of the alliance construct. Recently, Friedlander, Heatherington and



colleagues (2006) developed an alternate conceptualization of the alliance that is very similar to the model used by Pinsof and the majority of those studying the alliance in couple therapy.

While I believe their work, particularly the development of an observer rated measure of the alliance that captures its systemic nature, will move the field forward, we can avoid the “cloud of overlapping constructs” (Halverson, 2002) so common in the social sciences by revising and modifying existing theory rather than proposing new models that overlap significantly with existing ones.

Development of a conceptual change model with specific hypothesized relationships between predictors of and proximal and distal outcomes of alliance will assist researchers in selecting variables based on theory rather than convenience. Many of the client and therapist variables used to predict alliance formation have not been based on theory. For example, there is no reason to expect an association between alliance formation and number of children in the home, yet this variable was examined as a possible predictor of the alliance (Mamodhoussen et al., 2005). Often these variables have been used out of convenience rather than arising from theory. Using theory as the criteria for selection of variables to be studied will result in research that is more meaningful. For example, an examination of the match or mismatch between partners’ self-reported goals at intake and alliance formation could provide information on whether couple therapists are able to successfully establish an alliance when partners have divergent goals. Second, while not explicitly identified by Bordin (1979) or Pinsof (1994), the early alliance is most likely influenced by the match between client expectations of therapy and the therapy offered. The development of the alliance can be seen as a process of verbalizing unstated expectations and collaboratively aligning expectations with the service offered by the therapist. This may involve modifying expectations or modifying the treatment offered or a

referral to a therapist that might better match the client's expectations. Failure to conform to the expectations of clients is associated with early termination from therapy and dissatisfaction with treatment (Glass, Arnkoff, & Shapiro, 2001). Two studies in particular confirm that the alliance mediates the relationship between expectancy and outcomes in both individual and group therapy (Abouguendia, Joyce, Piper, & Ogrodniczuk, 2004; Joyce, Ogrodniczuk, Piper, & McCallum, 2003). Other fruitful areas of research arising out of theory include a focus on resolution of ruptures in couple therapy, the relationship between split alliances and early termination, and a focus on the within system alliance.

To accomplish such a research agenda, valid measures of the alliance need to be in place. My final recommendation is the subjection of the current measures of alliance to rigorous testing and refinement. The Couple Therapy Alliances Scale- Revised (Pinsof, 1994) has been criticized by several authors including the developer of the scale (L. N. Johnson & Wright, 2002; Pinsof, 1994). There is little evidence for the construct validity of the subscales. High correlations between subscales reflect the possibility of a single factor rather than the 12-factor model proposed by Pinsof. In the only confirmatory factor analysis of the Family Therapy Alliance Scale, a scale that differs from the CTAS only in the wording of the questions, the authors found that a three factor model consisting of bonds, goals and tasks, rather than the more complex model proposed by Pinsof, adequately fit the data (L. N. Johnson, Ketring, & Anderson, under review ). An exploratory factor analysis also failed to find support for the proposed factor structure of the CTAS, noting that a one-factor model appeared to fit best (Bourgeois et al., 1990). The instrument also appears to be limited by a ceiling effect and little variability (Heatherington & Friedlander, 1990; Pinsof & Catherall, 1986). It has also been criticized regarding its ability to adequately measure the within system alliance and the alliance of one's

partner with the therapist (L. N. Johnson & Wright, 2002). The recent introduction of the System for Observing Family Therapy Alliances (Friedlander, Escudero, Horvath et al., 2006) appears to address many of these issues. However, the scale has yet to be adopted by researchers in family therapy. As adequate measures are refined and shown to be invariant across husbands and wives, alliance researchers will be able to address the theoretical propositions of alliance theory.

### *Purpose of the Present Study*

The purpose of this study is to examine several of the propositions set out in the alliance literature using methods that are appropriate to studying the dyadic nature of the alliance. Based on current theorizing and research, this study will examine the relationship between the therapy alliance and both individual and relational distress in the early stages of therapy. It will test whether the alliance of each partner is related to her own change in distress from first to fourth session. While this proposition has been supported previously, this replication will greatly improve upon past research by controlling for the effects of the other partner's alliance and distress. This study will also be the first to test the proposition that the alliance of one partner will have an influence on the distress of the other partner. By using statistical models that allow for the examination of data from both partners simultaneously, this study will also be the first to directly examine whether there are sex differences in the relationship between alliance and outcome. These models will also allow for a direct test of the relative strength of the within and between systems alliance on outcome, as well as the relative strength of the bonds, goals, and tasks domains of the alliance on outcome. In summary, this study will represent the first attempt to examine the dyadic phenomenon of the therapeutic alliance in couple therapy using dyadic data.

## CHAPTER 3

### Methods

#### *Research Questions*

The primary purpose of this study is to examine the relationship between the therapy alliance and change in distress during the early stage of therapy. This study will seek to replicate and extend the findings from previous studies using analytical methods appropriate to the study of intimate dyads. Five research questions derived from current theorizing and research on the alliance will be evaluated for two measures of distress: individual psychological distress and relational distress. The first three questions will be asked of five different configurations of the alliance for each of these measures of distress, while questions four and five will be asked only once for each measure of distress. The five alliance configurations are as follows: the within system alliance (the alliance between partners), the between system alliance (the alliance between the client and therapist system), agreement on the goals of therapy, the affective bond component of the alliance and agreement on the tasks of therapy.

1. Is an individual's alliance associated with her *own* level of distress at session four? (Actor effect)
2. Is an individual's alliance associated with her *partner's* level of distress at session four? (Partner Effect)
3. Are there sex differences in the strength of the relationship between the husbands and wives' actor effects of the alliance on distress, as well as between their partner effects of the alliance on distress?

4. Is the association between within system alliance and distress stronger than the relationship between the between systems alliance and distress?
5. Are there differential effects for influence of the bonds, goals and task subscales of the alliance on distress?

### *Participants*

To evaluate these research questions I will use existing clinic data collected from two graduate training programs accredited by the Commission on the Accreditation of Family Therapy Education. Both the Auburn University Marriage and Family Therapy Center and the McPhaul Family Therapy Clinic at the University of Georgia provide individual, couple and family therapy to their local communities. Both offer services on a sliding fee scale based on family income and size. Client demographics at each clinic are expected to be similar-a mix of students and others in the community, with modest incomes, primarily Caucasian, and primarily heterosexual. The primary difference between the two clinics is the level of clinical experience. While both programs are training programs, Auburn is a Master's level program while the University of Georgia's program targets primarily doctoral-level students.

To be included in the study, couples must be in a committed heterosexual relationship, and seeking conjoint therapy to work on relational problems. Those in homosexual relationships will not be included due to the inability to analyze both distinguishable and indistinguishable dyads simultaneously (Kenny et al., 2006) . The expected number of homosexual relationships will preclude separate analyses to be performed for this group. Couples seeking premarital therapy will also be excluded from the sample. Couples must have attended four sessions of therapy, and thus be eligible for completing both the pretreatment and fourth session questionnaires to be included in the sample. This selection criterion eliminates those who may

have prematurely terminated therapy due to an inability to form a therapeutic alliance. While the link between alliance and early termination is a necessary step in examining the utility of this construct to couple therapy, it is not the focus of the present study.

### *Measures*

#### *Psychological Distress*

The Outcome Questionnaire 45.2 (OQ-45.2) was developed to measure both the outcome and progress of therapy (Lambert et al., 1996; Lambert, Okiishi, Finch, & Johnson, 1998; Wells, Burlingame, Lambert, Hoag, & Hope, 1996). The OQ-45.2 has been extensively evaluated and has demonstrated construct validity as a measure of general psychological distress and multiple forms of reliability (Doerfler, Addis, & Moran, 2002; Lambert et al., 1996; Mueller, Lambert, & Burlingame, 1998; Umphress, Lambert, Smart, Barlow, & Clouse, 1997; Vermeersch, Lambert, & Burlingame, 2000). While the developers of the OQ-45.2 have proposed three conceptually distinct subscales, symptom distress (SD), interpersonal relations, and social roles, research suggests that the instrument functions best as a measure of general psychological distress and recommends using either the symptom distress subscale or the overall score. The present study will use the symptom distress subscale as the measure of individual psychological distress. The primary reason for the use of the SD subscale rather than the total score is that the SD subscale does not contain any questions regarding interpersonal relationships, thus avoiding any conceptual overlap between psychological and relational distress. The SD scale consists of 25 items measuring common psychiatric symptoms, primarily those relating to depressive or anxiety disorders (Lambert et al., 1996). Items are measured on a five point Likert-type scale with possible values of zero through four. Scores range from 0 – 100 with a score of 36 or greater

differentiating between clinical and community populations. Higher scores indicate greater distress.

### *Relational Distress*

The Revised Dyadic Adjustment Scale (RDAS; Busby, Crane, Larson, & Christensen, 1995) is a 14-item self-report revision of the original 32-item Dyadic Adjustment Scale (Spanier, 1976) which has demonstrated adequate reliability and validity (Busby et al., 1995). The total score on the RDAS ranges from 0-69, with lower scores indicating greater relationship distress. In previous research, Busby and associates (1995) reported an internal consistency alpha for the RDAS of .90. A cutoff score of 48 on the RDAS discriminates between distressed and non-distressed couples (Crane, Middleton, & Bean, 2000).

### *Therapeutic Alliance*

Two measures of the therapeutic alliance will be used in this study. The primary measure of the alliance is the 40-item Couples Therapy Alliance Scale-Revised (CTAS-R(Pinsof, 1994)), a revision of Pinsof and Catherall's (1986) original 29-item scale. It measures the three content areas of the alliance, tasks, goals and bonds, for each of the possible interpersonal subsystems in couple therapy: (a) Self-therapist (Self subscale), (b) partner-therapist (Other subscale), (c) the alliance between the couple and the therapist (Group subscale) and (d) the alliance between partners (Within subscale). Crossing these four aspects of the interpersonal dimension of the alliance with the three content areas results in a 12-factor model of the alliance.

For this study, the 40 items of the CTAS-R will be used in two different ways. The first will collapse these items based on the interpersonal dimension to create the between and within systems alliance subscales. The second will collapse the 40 items along the content dimension to create the bonds, goals and tasks subscales.

To create the between systems alliance score, the 29 original scale items measuring the bonds, goals, and tasks across the three between-systems levels of the alliance (self, other and group) will be summed. These three subscales are collapsed into the between systems alliance scale because of critiques raised by L.N. Johnson and Wright (2002). They point out that the interpersonal dimension requires an inordinate level of insight on the part of the rater. It is improbable that a wife, for example, will be able to distinguish between her alliance with the therapist, her partner's alliance with the therapist, and the alliance of the couple with the therapist. It is more probable, however, that partners will be able to distinguish between their relationship with the therapist and their relationship with their partner. To measure the alliance between partners, the 11 items measuring goals, bonds and tasks across the within system subscale will be summed to create the within systems alliance subscale.

To create the bonds, tasks and goals subscales, the 40 items will be collapsed along the content dimension. The bonds subscale consists of 13 items, the goals subscale contains 11 items and the tasks subscale contains 16 items. The ability of the CTAS to adequately measure the content dimension has also been criticized in the literature. The bonds, goals and tasks subscales are highly interrelated, with correlations ranging from .77 to .97 (Heatherington & Friedlander, 1990). Furthermore, Bourgeois and colleagues (1990) used exploratory factor analysis and found that a one factor model provided the best fit using the original version of the CTAS. However, using a similar family version of the Therapy Alliance Scale, L.N. Johnson and his colleagues (under review ) demonstrated that the three factor model consisting of the bonds, goals, and tasks dimensions of the alliance provided a good fit to the data when the family rather than the individual was treated as the unit of analysis. In this study, the data will be examined in a dyadic context and will therefore use the content dimension subscales.



All subscales of the alliance are reliable with internal consistencies ranging from .75 to .95 (Mamodhoussen et al., 2005). Items are measured on a 7 point Likert-type scale resulting in possible scores of 0-203 for the between systems alliance, 0-77 for the within system alliance, 0-91 for the bonds, 0-77 for the goals and, 0-112 for the tasks subscale of the alliance. Higher scores indicate a stronger alliance.

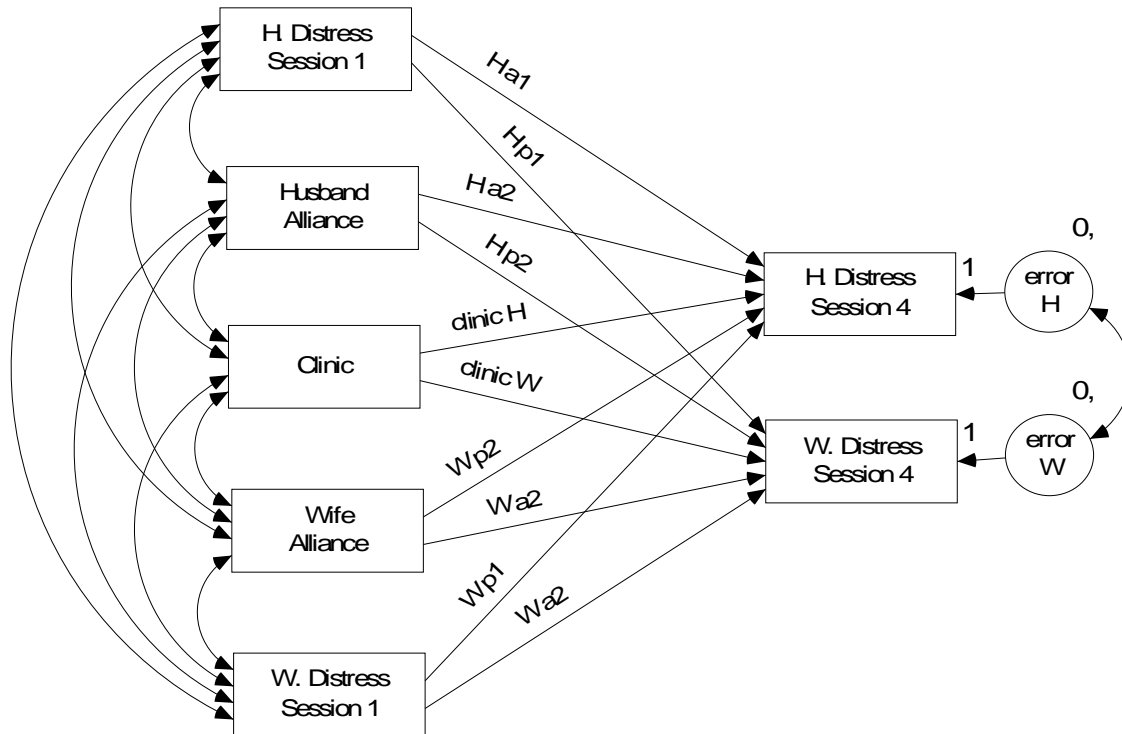
The second measure of the alliance which will be used to assess the stability of the construct is the alliance sub-scale of the Intersession Report (L. N. Johnson, Ketring, & Anderson, under review). The alliance subscale is a two-item measure of the global alliance between therapist and client. Responses on each question range from 1 “Very poor” relationship to 7 “excellent” relationship. This very brief measure of the alliance is significantly though moderately correlated with the total score of the CTAS ( $r = .29$ ). The results of each measure of alliance are kept confidential and are not shared with therapists in order to decrease biased reporting of the alliance.

### *Procedure*

All couples seeking treatment at either clinic are invited to participate in on-going clinical research. After proper consent is obtained, couples are invited to complete assessment packets for both treatment and research purposes prior to the first session. These packets contain basic demographic and family background questions, the OQ 45.2, and the RDAS. Prior to each subsequent session, each participant completes the Intersession Report independently. Following the fourth session, therapists administer the OQ-45.2, RDAS, and the CTAS-R. This battery of instruments is administered following the eighth session and every eight sessions thereafter.

## *Models*

The research questions outlined earlier can be represented visually as path models (see Figures 1, 2 and 3). The first research question deals with the impact of an individual's alliance on her own outcome. In Figure 1, these effects are the actor effects for the husband on his session four distress ( $Ha_2$ ) and the actor effect for the wife on her session four distress ( $Wa_2$ ). In Figures 2 and 3, the paths labeled  $Ha_3$ ,  $Ha_4$ ,  $Wa_3$  and  $Wa_4$  denote additional alliance actor effects. The second research question is portrayed by the partner effect paths  $Hp_2$  and  $Wp_2$ , which represent the effect of a husband's alliance on his wife's outcome and vice versa. The third research question, restated in the language of Figure 1, asks whether the husband's actor effect is equivalent to the wife's actor effect ( $Ha_2 = Wa_2$ ), and whether the husband's partner effect is equivalent to the wife's partner effect ( $Hp_2 = Wp_2$ ). Question four, using the model presented in Figure 2, asks whether the between systems alliance is equivalent to the within systems alliance for husbands ( $Ha_2 = Ha_3$ ;  $Hp_2 = Hp_3$ ) and for wives ( $Wa_2 = Wa_3$ ;  $Wp_2 = Wp_3$ ). Similarly, question 5 asks whether there are differences in the effect of bonds, goals and tasks on outcome for husbands ( $Ha_2 = Ha_3 = Ha_4$ ;  $Hp_2 = Hp_3 = Hp_4$ ) and wives ( $Wa_2 = Wa_3 = Wa_4$ ;  $Wp_2 = Wp_3 = Wp_4$ ). In all models, pre-treatment levels of distress as well as the location of treatment are controlled for. Specific details of these models will be discussed in the Planned Analyses section immediately following the presentation of these figures.



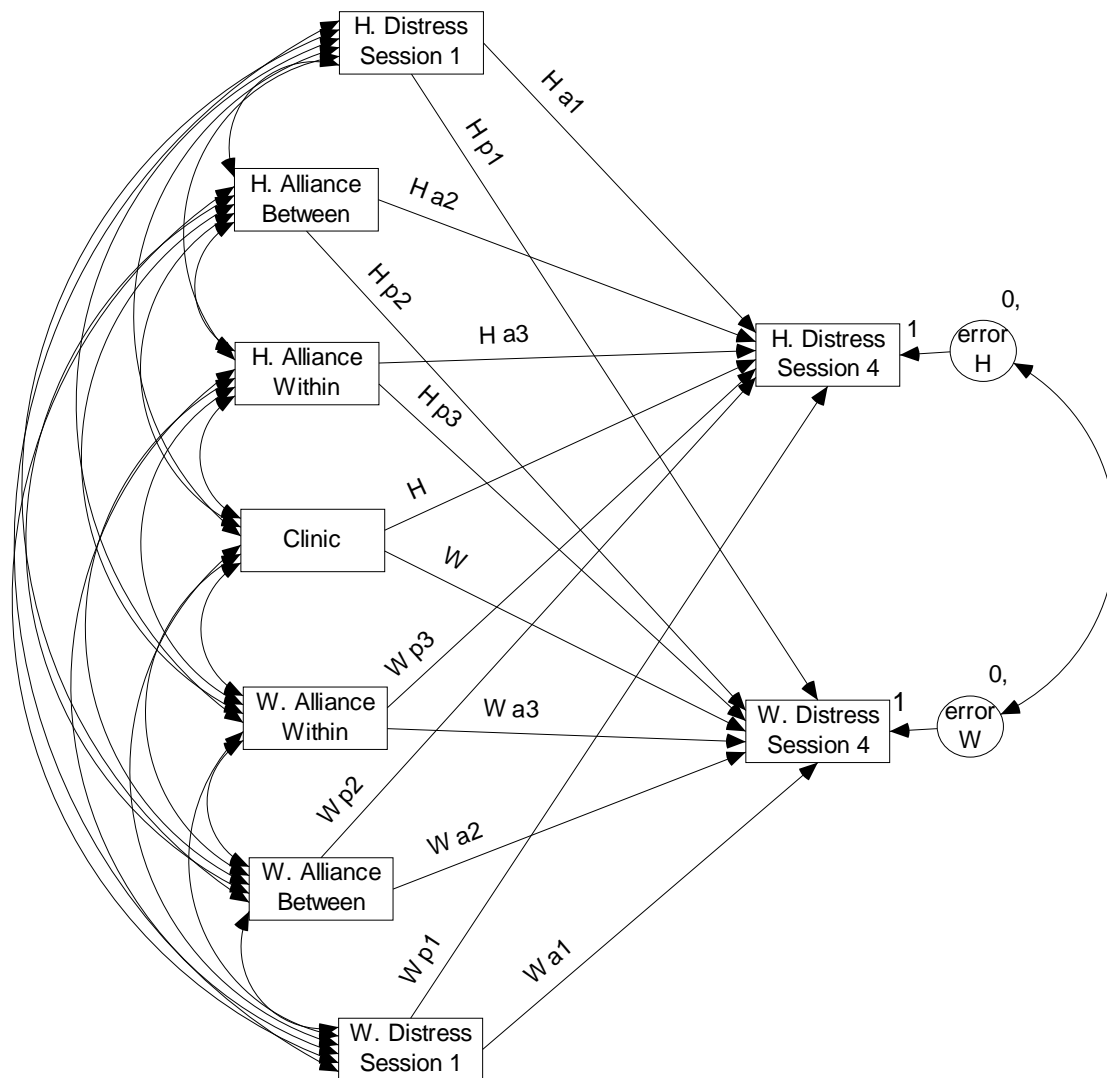
*Figure 1. APIM of the effect of alliance on distress*

$H_{A1}/W_{A1}$ : Husband/wife actor effect of Pretreatment distress on session 4 distress

$H_{P1}/W_{P1}$ : Husband/wife partner effect pretreatment distress on partner session 4 distress

$H_{A2}/W_{A2}$ : Husband/wife actor effect of alliance on session 4 distress

$H_{P2}/W_{P2}$ : Husband/Wife partner effect of alliance on partner session 4 distress



*Figure 2. APIM examining the relative impact of the between and within systems alliances*

$H_{A1}/W_{A1}$ : Husband/wife actor effect of pre-treatment distress on session 4 distress

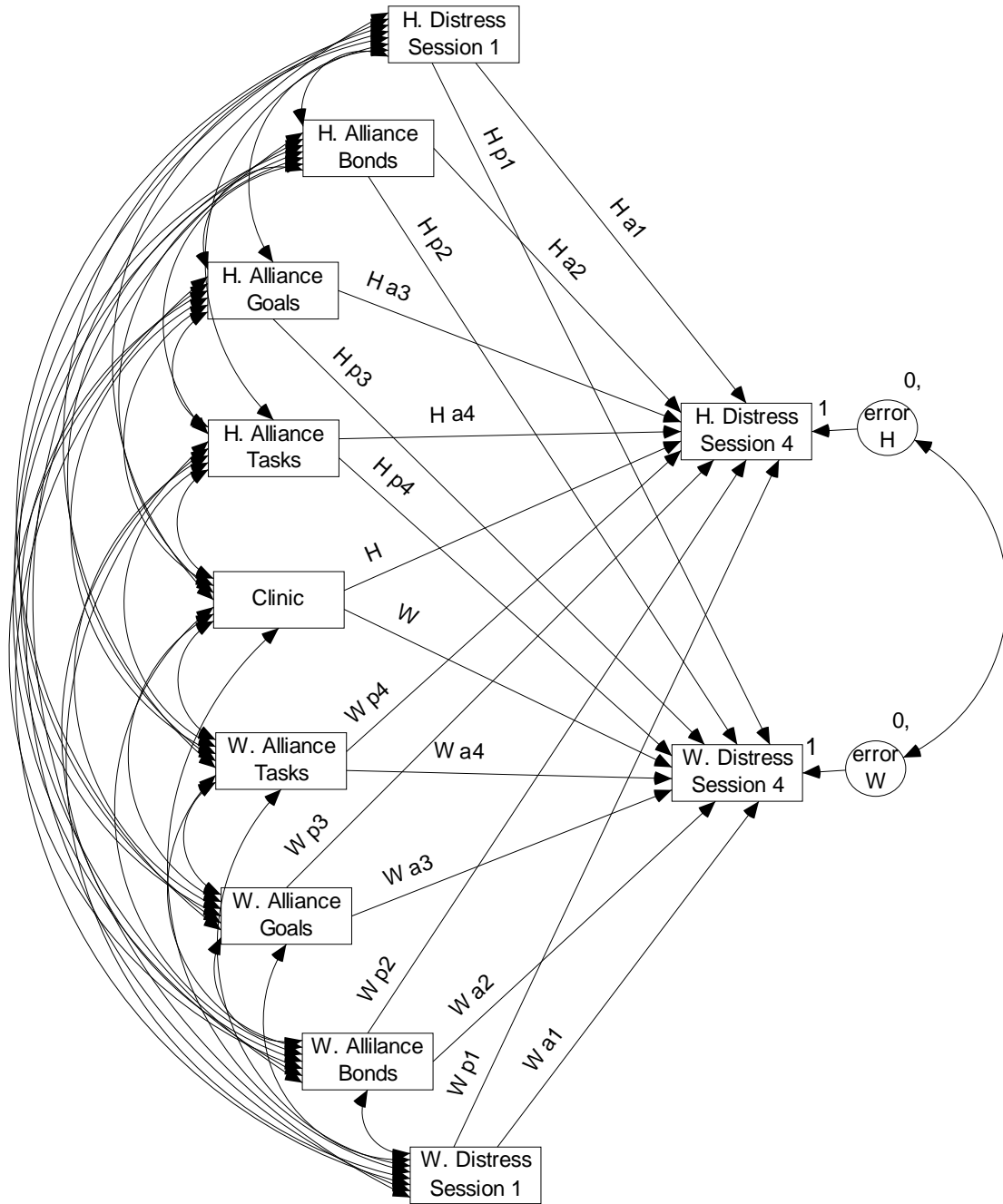
$H_{P1}/W_{P1}$ : Husband/wife partner effect pre-treatment distress on partner session 4 distress

$H_{A2}/W_{A2}$ : Husband/wife actor effect of between systems alliance on session 4 distress

$H_{P2}/W_{P2}$ : Husband/Wife partner effect of between systems alliance on partner session 4 distress

$H_{A3}/W_{A3}$ : Husband/wife actor effect of within system alliance on session 4 distress

$H_{P3}/W_{P3}$ : Husband/Wife partner effect of within system alliance on partner session 4 distress



*Figure 3. APIM examining the relative effect of the content domain of the alliance on distress*

$H_{A1}/W_{A1}$ : Husband/wife actor effect of pre-treatment distress on session 4 distress

$H_{P1}/W_{P1}$ : Husband/wife partner effect pre-treatment distress on partner session 4 distress

$H_{A2}/W_{A2}$ : Husband/wife actor effect of bonds subscale on session 4 distress

$H_{P2}/W_{P2}$ : Husband/Wife partner effect of bonds subscale on partner session 4 distress

$H_{A3}/W_{A3}$ : Husband/wife actor effect of goals subscale on session 4 distress

$H_{P3}/W_{P3}$ : Husband/Wife partner effect of goals subscale on partner session 4 distress

$H_{A4}/W_{A4}$ : Husband/wife actor effect of tasks subscale on session 4 distress

$H_{P4}/W_{P4}$ : Husband/Wife partner effect of tasks subscale on partner session 4 distress

### *Planned Analyses*

Analyses will occur in three phases: a preliminary phase to describe the sample and assess the assumptions of regression, a series of analyses testing the effects of each type of alliance separately to answer research questions 1 through 3, and finally a series of analyses in which multiple alliances will be tested simultaneously in order to answer questions 4 and 5. In the preliminary phase, all variables will be examined to assess the assumptions of multiple regression and to examine variables that are associated with missing data. Non-independence of data and multi-collinearity are assumed when examining dyadic data and are accounted for in the analytical model that will be used. Data will also be assessed for outliers that will be removed prior to running the final analyses.

T-tests and chi-square analyses will be used to compare cases with missing data and those without missing data on demographic variables, clinic at which the data was collected, as well as levels of pre-treatment distress and attachment. Significant predictors of missing data will be included in all models. By including variables that are associated with missingness, the assumption that data are missing at random is more tenable (Little & Rubin, 1989). The benefit of this assumption is that it makes possible the use of estimation techniques that allow for missing data such as full information maximum likelihood (FIML) estimation (Enders & Bandalos, 2001). Estimation of all models will be done using Amos 6.0 (Arbuckle, 2003) with FIML to account for missing data.

One limitation of the proposed study is the measurement of the alliance at the same time as outcome measures. It is possible that any correlation between alliance and outcome could be due to confounding variables that predict both the alliance and outcome. To examine this possibility, the correlation between the alliance as measured by the Intersession Report at

sessions two through eight, and the alliance as measured by the between and within subscales of the CTAS-R will be observed to determine the stability of this construct. Pinsof (1994; 1986) as well as others (Knobloch-Fedders et al., 2004, 2007) has suggested that the alliance is a stable construct developed during the first session.

The second and third analytical stages will involve the direct testing of the five research questions set out at the beginning of this chapter. Before presenting the specific analytical plan to address each of these questions, I will describe the actor-partner interdependence model that will be used to examine each of these questions. What differentiates this study from past studies is the analysis of dyadic data. By including both partners in the model, this study will explore the systemic construct of the alliance in couple therapy in a way that was previously impossible. In determining the appropriate dyadic model to use for analysis, Kenny, Kashy and Cook (2006) note that the first step is to determine whether the independent and dependent variables vary within or between couples. For example, in the heterosexual sample I will use for this study, the variable sex will vary within but not between couples while the clinic at which couples were seen will vary between but not within couples. The primary variables of interest in this study; alliance, distress, and attachment; are all mixed variables. The level of alliance, for instance, varies both between and within couples. The analytical model of choice for analyzing non-independent data with mixed variables is the Actor-Partner Interdependence Model or APIM (Kenny, 1996; Kenny et al., 2006).

An expanded version of the APIM is presented in Figure 1. In the basic model, each partner exerts an influence both on his own outcome (actor effect) as well as on the outcome of his partner (partner effect). By allowing the predictors to covary, non-independence in these predictors is accounted for. Allowing the error terms to covary accounts for other sources of non-

independence. While the APIM can be tested using many different methods (e.g. pooled regression, multi-level modeling, and structural equation modeling) SEM software allows for a straightforward analysis and allows constraints to be placed on various paths in the model. This feature allows for the direct testing of questions regarding the equivalence of the effects of alliance on outcome for men and women (research question 3), for the between and within systems alliances (question 4), and for the bond, goals and tasks subscales of the alliance (question 5).

It is important to note that SEM is being employed as a tool for convenient estimation of the manifest variable models presented in Figures 1, 2 and 3. The ability of SEM to include latent variables that adjust for measurement error is not being used in these analyses. Typically, when SEM is used to test the APIM, the saturated or just-identified model is used. This model is equivalent to two pooled regression analyses. Methodologists who specialize in the analysis of dyadic data have argued that the large sample sizes typically associated with SEM applications can be relaxed when using the APIM (Cook & Kenny, 2005; Kenny et al., 2006). Kenny and Cook (1999) state,

Unless latent variables are used, the estimation procedure is nothing more than a constrained set of multiple regression equations. Consequently, the usual sample size restrictions for structural equation modeling do not apply, and the usual rules of thumb for sample size in multiple regression analysis do apply (pp. 441-442).

A rule of thumb for obtaining power of .80 with an alpha of .05 and a medium effect size is  $104 + m$ , where  $m$  represents the number of independent variables in the model. This rule of thumb approximates the results of more complex power analyses when examining the partial correlations of interest in this study (Green, 1991). One important distinction between APIM and



traditional regression is that when using the APIM, sample size is based on the number of couples rather than the number of individuals in the sample.

Dyadic data analysis represents two significant improvements over past research. First, the non-independence of data is accounted for. Non-independence affects the variance, thereby biasing standardized measures such as  $r$  as well as the standard errors of test statistics and their associated  $p$  value (Kenny et al., 2006). The second improvement is theoretical. By analyzing husbands and wives simultaneously researchers are able to tap into the systemic nature of the alliance construct, allowing research questions like those asked in this project to be explored.

In the second set of analyses, each of the five alliance scales will be used to independently predict both relational and individual distress using the actor-partner interdependence model presented in Figure 1. This model simultaneously addresses the first three research questions. Question 1 examines the impact of each partner's actor effect of alliance on distress. Actor effects are represented in Figure 1 by the paths Ha2 for husbands and Wa2 for wives. The partner effects (question 2) of each partner's alliance on his companion's fourth session distress are depicted by the paths Hp2 for male partners and Wp2 for female partners. In order to maintain a family-wise error rate of .05, the alpha levels for these models will be adjusted using the Bonferroni correction of  $\alpha/n$  where  $n$  represents the number of hypotheses tested on the same dependent variable. In this study, five models will be run to examine the impact of each of five alliances on relational and psychological distress; therefore alphas will be divided by five. A  $p$ -value of .01 corresponds to the traditional .05 level and a value of .002 corresponds to the traditional .01 level.

In order to explore the third research question regarding sex differences in the strength of the relationship between alliance and outcome, a series of constraints will be imposed on each of

these models. First, partner effects for pretreatment levels of distress will be set equal for husbands and wives ( $H_{p1} = W_{p1}$ ). Second, actor effects for pretreatment levels of distress will be set equal ( $H_{a1} = W_{a1}$ ). Third, partner effects of the alliance on outcome will be set equal ( $H_{p2} = W_{p2}$ ) and finally, actor effects for the alliance on outcome will be set equal ( $H_{a2} = W_{a2}$ ). Each of these constraints tests the hypothesis that there is no difference between husbands and wives on the variables constrained to be equal. Significant changes in model fit indicate that the constraints have significantly worsened the fit of the model to the data. Therefore, if constraining the effect of the alliance on outcome to be equal for husbands and wives significantly decreases the model fit, there is evidence for significant differences in the alliance on outcome based on sex. At each step, model fit will be assessed by reporting the  $\chi^2$  change test. Significant changes in  $\chi^2$  are indicative of constraints that significantly worsen model fit.

The final phase of data analysis will consist of four additional complex actor-partner interdependence models (APIMs) presented in Figures 2 and 3. First an APIM regressing individual psychological distress on the between and within system alliance will be tested to examine the relative importance of the within systems alliance compared to the between systems alliance (research question 4). To test for the differential effects of the between and within systems alliances on distress, husband's between systems alliance actor effect will be set equal to his within system alliance actor effect. In Figure 2 this constraint is imposed by constraining the path  $H_{a2} = H_{a3}$ . Husbands' partner effect will also be equated ( $H_{p2} = H_{p3}$ ). These constraints will also be imposed on wives actor ( $W_{a2} = W_{a3}$ ) and partner effects ( $W_{p2} = W_{p3}$ ).

Second, an APIM regressing individual psychological distress on the content dimensions of the alliance (bonds, goals, and tasks) will be estimated. This model is depicted in Figure 3. By including these dimensions simultaneously, I will be able to examine the relative importance of

each of these content dimensions in relation to the other two (research question 5). For example, to test the relative impact of a husband's tasks actor effect compared to his goals and bonds actor effects on distress, paths Ha3 and Ha4 will be equated, followed by constraining Ha4 equal to Ha2. Partner effects will also be examined by constraining Hp3 equal to Hp4 and Hp4 equal to Hp2. These constraints will also be imposed on the female partners' actor and partner effects.

These complex analyses will then be repeated using relational distress as the dependent variable. These more complex analyses are expected to have low power and should therefore be seen as conservative tests of significance. Using the  $104 + m$  rule of thumb, these analyses should have sufficient power to detect moderate effects. However, after partialling out the common variance among the different sub-scales of the alliance, it is expected that the partial correlations between any one subscale and outcome will be small, thus decreasing the statistical power. Because of this decreased power, alphas for these additional models will not be modified using a Bonferroni adjustment.

## CHAPTER 4

### Results

Five research questions derived from current theorizing and research on the alliance were evaluated for two measures of distress: individual psychological distress and relational distress. Question 1 asked whether an individual's alliance is associated with her *own* level of distress at session four (Actor effect). Question 2 asked whether an individual's alliance is associated with her *partner's* level of distress at session four (Partner Effect). The third question examined whether there are sex differences in the strength of the relationship between the husbands and wives' actor effects of the alliance on distress, as well as between their partner effects of the alliance on distress. Question 4 asked whether the association between the within system alliance and distress was stronger than the relationship between the between systems alliance and distress. Finally, question 5 asked whether there are differential effects for influence of the bonds, goals and tasks subscales of the alliance on distress. Questions 1 through 3 were repeated for each of five subscales of the alliance: the between systems alliance, the within systems alliance, the goals subscale of the alliance, the bonds subscale of the alliance and the tasks subscale of the alliance.

The results of these analyses will be grouped according to whether individual psychological distress or relational distress was being predicted. Prior to presenting results to the primary research questions, results of preliminary analyses examining demographics, attrition, and data considerations will be presented.

### *Preliminary Analyses*

Preliminary analyses were conducted to examine (a) demographics of all couples completing at least one session at the either of the two clinics in this study, (b) differences between those who dropped out of therapy prior to completing four sessions and those who continued past four sessions, (d) demographics for the final sample of 173 couples, (e) correlates of missing data at session four, (f) an examination of differences between the McPhaul and Auburn samples, (h) reliability estimates for all scales, (i) the stability of the alliance, (j) the assumption of normality, and (k) correlations between variables to be entered into the final models.

#### *Demographic and Other Characteristics of Total Clinical Population*

After eliminating same-sex couples and couples seeking premarital counseling, 287 couples attended the first session of therapy at one of the two participating clinics. Two hundred ten of these couples sought treatment at Auburn's clinic while 77 couples came from UGA's clinic. Couples participating in therapy were predominantly White (78.2 % of women and 78.9 % of men) with 16.1 and 16.8 % of women and men reporting their race as Black and 5.8% of women and 4.3% of men reporting other races. Thirty percent of the sample reported incomes below \$20,000, 40% reported incomes between \$21,000 and \$40,000 and 30.2 % reported incomes of greater than \$40,000. Sixty-nine percent of couples reported being married to their partner, 8.7% reported being separated or divorced and 22.3% reported being in a significant committed relationship with their partner. 26.9% of women and 30.8% of men reported attaining high school or less education, 40.3% of women and 32.7% of men reported earning an associates or bachelors degree and 14.9% of women and 9.8% of men report receiving a master's degree. The remainder reported either "other" or "vo/tech" as their highest educational attainment.

Emotional, physical, verbal and sexual abuse in the current family were common in this sample, with 46.2 % of couples endorsing one or more of these types of abuse in their current family. These forms of abuse were even more common in the family of origin of these couples, with 61.3% of couples endorsing items measuring abuse in their family of origin. Over a quarter of couples endorsed an item measuring substance abuse in their current family (29.4%), and 12.5 % of couples said that they were currently facing legal problems.

#### *Variables Associated with Discontinuing Therapy Prior to the Fourth Session*

One hundred and fourteen couples (39.7%) dropped out of therapy prior to the fourth session. Fifty of these couples only attended the first session. Seventy-seven completed between four and seven sessions and ninety-six completed eight or more sessions. Chi-square analyses and t-tests were used to compare those who dropped out prior to the fourth session of therapy with those who completed at least four sessions of therapy. Results of these analyses are presented in Tables 1 and 2. All variables were dummy coded to avoid violating the assumptions of the analysis. Several cells had low cell counts and would have biased the estimates. Dummy coding also allows for easier interpretation of the results. Of the variables used to predict continuance in therapy, only abuse in the current relationship and husband's attainment of at least some college education were significant. Couples who reported abuse in their current relationship were more likely to drop out of therapy while couples in which the male partner had attained at least some college education were more likely to continue in therapy.

Table 1

*Summary of  $\chi^2$  Analyses Comparing Couples Continuing or Dropping Out of Therapy Prior to the Fourth Session*

Variable	n	% among Total	% among Continue	% Among Drop	$\chi^2(1)$	Cramer's V
Current abuse	279	46.2	39.2	56.6	8.25**	.17 **
FOO abuse	282	61.3	56.8	68.1	3.67	.11
Wife White	280	78.2	78.6	77.7	0.03	.01
Husband White	280	78.9	78.6	79.5	0.03	.01
Wife college educated	258	64.0	66.4	60.4	1.00	.06
Husband college educated	241	56.8	63.9	46.4	7.23**	.17**
Substance abuse- current family	279	29.4	26.9	33.0	1.20	.07
Legal problems- current family	280	12.5	11.4	14.2	0.48	.04
Pressured for therapy	287	31.0	28.9	34.2	0.91	.06
Family income < \$30,000	276	52.2	52.4	51.8	0.01	.01
Clients at Auburn's Clinic	287	73.2	71.7	75.4	0.50	.04

\*\*p < .01

Table 2

*Summary of T-test Comparisons of Couples that Drop Out or Continue in Therapy on Pre-treatment Variables*

Variable	n		M		SD		t(df)
	Drop	Cont.	Drop	Cont.	Drop	Cont.	
2 <sup>nd</sup> session IS <sup>a</sup> alliance male	41	124	10.27	10.60	2.26	2.28	-0.80(163)
2 <sup>nd</sup> session IS alliance female	47	124	10.55	10.61	2.01	2.19	-0.16(169)
Pre OQ SD subscale male	106	154	33.76	31.87	13.23	12.66	1.16(258)
Pre OQ SD subscale female	109	162	37.55	38.06	15.57	15.93	-0.26(269)
Pre RDAS male	100	155	38.67	40.95	9.90	8.92	-1.91(253)
Pre RDAS female	104	161	35.78	37.92	10.50	9.94	-1.68(263)
Pre Avoidance <sup>b</sup> male	105	159	50.03	48.33	18.41	18.16	0.74(262)
Pre Anxiety male	105	159	69.75	66.01	21.39	23.21	1.32(262)
Pre Avoidance female	107	165	50.76	51.80	18.49	18.41	-0.45(270)
Pre Anxiety female	107	165	74.65	73.94	23.40	20.85	0.80(270)

<sup>a</sup>IS = Intersession Alliance Scale

<sup>b</sup>Avoidance and Attachment = Attachment related avoidance and attachment subscales of the Experiences in Close Relationships scale

### *Demographics of Final Sample*

Those who dropped out of therapy prior to the fourth session were excluded from further analyses, leaving a sample size of 173 couples. This sample was similar to the initial sample in terms of income (28.7 % earn  $\leq$  \$20,000, 43.8% report incomes of \$21-40,000 and 27.5% earn at least \$40,000), marital status (68.2% married, 11% separated, 20.8% committed adult relationship), and race (78.6 White, 15.5% men and 16.1% women Black). More than half of women (65%) and half of the men in the sample reported having previously been in therapy. A significant number of men and women report feeling at least somewhat pressured to come for therapy (23.6 % and 7.3% respectively). There was significantly less current physical, emotional, verbal or sexual abuse in the final sample, with 39.2% of couples reporting the occurrence of at least one type of current abuse. Over half of the couples (56.8 %) report a history of abuse in their family of origin. Substance abuse was reported by 26.9% of couples. Just over one in ten couples reported experiencing current legal problems (11.4 %). Couples report an average length of relationship of 6.56 years. Due to the wording of the question regarding relationship length, it is unclear whether clients are referring to length of cohabitation, marriage, or whether this indicates total length of relationship including courtship. On average men were slightly older than their partners with respective mean ages of 31.65 and 30.42. On average couples attended a median of eight sessions (range 4 – 63).

### *Variables Associated with Missing Data at Session Four*

Of the 173 couples that completed at least four sessions of therapy and were therefore eligible to complete the fourth session assessments, 104 had valid data from both partners, 16 had valid data from only one partner, and 53 had no session 4 data. Pre-test and demographic variables were used to examine covariates of missing data from one or both partners. In order to



use full information maximum likelihood estimation to account for missing data in final analyses, data are assumed to be missing at random (MAR). The assumption of MAR is met when variables that covary with missingness, are included as predictors in the model to be estimated (Little & Rubin, 1989). Results of these analyses are presented in Tables 3 and 4. Only the location of clinic was associated with missingness with clients at UGA's clinic being significantly less likely to complete session 4 questionnaires (38.3 % of total sample accounts for 43.5% of missing data).

Table 3  
*Summary of  $\chi^2$  Analyses Comparing Participants with and without missing data*

Variable	n	% among total	% among complete	% among missing	$\chi^2$	Cramer's V
Current abuse	166	39.2	35.4	44.8	1.49	.10
FOO abuse	169	56.8	56.0	58.0	0.07	.02
Wife White	168	78.6	81.0	75.0	0.87	.07
Husband White	168	78.6	79.0	77.9	0.03	.01
Wife College	152	66.4	65.6	67.7	0.08	.02
Husband college	144	63.9	65.1	62.1	0.14	.03
Substance abuse- current family	167	26.9	25.3	29.4	0.35	.05
Legal problems-current family	167	11.4	11.1	11.8	0.02	.01
Pressured for therapy	173	28.9	29.8	27.5	0.75	.44
Family income < \$30,000	166	52.4	54.5	49.3	0.45	.05
Clients at Auburn's Clinic	173	71.7	81.7	56.5	12.98**	.27

\*\*p < .01

#### *Differences Between the Auburn and UGA Clinics*

Next, Auburn and UGA samples were evaluated using t-tests and chi-square analyses to examine differences between the two clinics. Couples from the two clinics were similar in terms of abuse in the current family, abuse in the family of origin, race of both men and women, educational attainment of both men and women, substance abuse problems, legal problems, income, pre-test OQ scores for both men and women, pre-test marital satisfaction for both men

and women, attachment related anxiety and avoidance for both sexes, number of sessions attended, and age of both partners. The clients at the two clinics differed significantly on three variables. The male partner's alliance, as measured by the intersession report alliance scale prior to session two, was significantly higher at UGA's clinic ( $M = 11.31$ ,  $SD = 2.21$ ) compared to Auburn's clinic ( $M = 10.35$ ,  $SD = 2.26$ ;  $t(122) = -2.09$ ,  $p = .04$ ). Clients at Auburn's clinic reported relationships lasting approximately two years longer than clients at UGA's clinic ( $t(156) = 2.05$ ,  $p = .04$ ). Auburn clients were also more likely to feel somewhat pressured to come to therapy (33.9% v 18.4%,  $\chi^2(1) = 4.06$ ,  $p = .04$ ). Due to these differences, as well the association of clinic with missing data, the clinic at which services were received was included as a predictor in all models.

Table 4  
*Differences between Participants with and Without Missing Data at Session 4*

Variable	n		M		SD		$t(df)$
	Miss	Comp <sup>a</sup>	Miss	Comp	Miss	Comp	
2 <sup>nd</sup> session IS alliance-male	45	79	10.71	10.53	2.43	2.20	.42(122)
2 <sup>nd</sup> session IS alliance-female	48	76	10.77	10.51	2.10	2.25	.64(122)
Pre-symptom distress-male	58	96	33.12	31.12	13.61	12.06	.95(152)
Pre symptom distress-female	66	96	39.44	37.10	17.30	14.92	.92(160)
Pre OQ total male	58	95	62.55	58.60	21.97	19.73	1.15(151)
Pre OQ total female	66	96	72.33	67.07	26.83	23.60	1.62(160)
Pre RDAS male	61	94	41.07	40.87	9.68	8.45	0.13(153)
Pre RDAS female	63	98	37.21	38.38	11.56	8.78	-.73(159)
Pre Avoidance male	60	99	66.92	65.47	25.11	22.09	1.13(157)
Pre Anxiety male	60	99	66.92	65.47	25.11	22.09	.38(157)
Pre Avoidance female	66	99	54.62	49.92	18.12	18.45	1.61(163)
Pre Anxiety female	66	99	71.80	75.67	21.49	20.39	-1.08(163)

<sup>a</sup>Comp = Complete data, Miss = Missing data

### *Reliability of Scales*

Internal consistency reliability estimates were good to excellent for all scales with Chronbach's  $\alpha$  ranging from .84 (male partner RDAS pretest) to .96 (CTAS between systems alliance subscale for both partners). All reliabilities are reported in Table 5.

Table 5  
*Summary of the Reliability of Scales (Chronbach's  $\alpha$ )*

Scale	# of items	Pre-test		Post session 4	
		Male $\alpha$	Female $\alpha$	Male $\alpha$	Female $\alpha$
OQ 45.2 Symptom Distress	25	.88	.93	.93	.94
RDAS	14	.84	.86	.85	.86
CTAS					
Between	29	--	--	.96	.96
Within	11	--	--	.89	.89
Bonds	13	--	--	.92	.91
Goals	11	--	--	.90	.88
Tasks	16	--	--	.93	.92

### *Correlations Between Intersession Alliance and CTAS Subscales*

The between and within systems alliance subscales of the CTAS are the primary independent variables of interest in this study. Since participants complete both the CTAS and measures of distress at session four, it is important to demonstrate that the alliance is a stable construct developed early in the therapy process. This is important because the alliance is being used to predict level of distress. If the alliance is a stable construct then the chances are reduced that the direction of effect from alliance to distress has been misspecified. Recent research has demonstrated that the alliance is formed during the first session and remains stable throughout treatment (Knobloch-Fedders et al., 2007). To examine the stability of the alliance in this sample, the correlations between the intersession report alliance subscale and the between

and within system subscales of the CTAS were examined to determine whether the intersession alliance adequately measures the alliance. If the intersession alliance scale adequately measures the alliance, it is possible to gauge the stability of the alliance by examining the correlations among the intersession report alliance scales from sessions two through eight. As the alliance subscale of the intersession report is a two-item measure that cannot adequately capture the complexity of the 40 item CTAS, it was expected that there would be moderate (.30 to .49) but significant correlations between the intersession alliance and CTAS subscales, and strong (.50 to 1.0) correlations among intersession reports. These correlations are reported in Table 6.

As expected, correlations between the intersession report (IS), administered prior to sessions two, three, four and five were significantly correlated with both the between and within systems alliance subscales. The strength of these correlations was stronger than predicted, with large correlations reported between all intersession reports and the between systems alliance at session four (males:  $r = .47$  to  $.59$ ; females:  $r = .52$  to  $.69$ ). Correlations between the intersession alliance and the within systems alliance were more modest (males:  $r = .32$  to  $.51$ ; females:  $.37$  to  $.61$ ). This was expected as the intersession alliance scale items both measure the between systems alliance. These correlations indicate that the intersession alliance scale adequately captures the essence of the alliance as measured by the CTAS.

In order to gauge the stability of the alliance, correlations among IS alliance scale totals from session two through eight were examined. As predicted, correlations among IS alliance scores for all sessions were significantly and strongly correlated for both men ( $r = .64$  to  $.84$ ) and women ( $r = .54$  to  $.73$ ). These correlations provide support for the stability of the alliance across sessions two through eight.

Table 6

*Correlations Between Intersession Alliance (IS) and CTAS Subscales with Data for Males Presented Above the Diagonal and Data for Females Below the Diagonal<sup>a</sup>*

Alliance <sup>b</sup>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. IS (2)		.74	.64	.70	.84	.70	.73	.47	.32	.46	.36	.43	.57	.46	.54	.58	.55
2. IS (3)	.73		.84	.73	.83	.71	.74	.53	.45	.54	.43	.50	.51	.35 <sup>ns</sup>	.53	.46*	.42*
3. IS (4)	.70	.86		.77	.78	.70	.64	.51	.45	.52	.44	.48	.42*	.37*	.46*	.35 <sup>ns</sup>	.41*
4. IS (5)	.60	.76	.83		.78	.70	.78	.52	.43	.54	.38	.50	.37*	.31 <sup>ns</sup>	.38*	.36*	.38*
5. IS (6)	.66	.70	.80	.80		.82	.87	.59	.53	.62	.49	.56	.45*	.36*	.41*	.47	.45*
6. IS (7)	.65	.76	.78	.78	.81		.79	.54	.56	.59	.51	.52	.55	.40*	.53	.53	.47*
7. IS (8)	.54	.74	.76	.71	.83	.79		.58	.51	.60	.44	.57	.51	.48*	.46*	.62	.50
8. Btwn (4)	.52	.56	.66	.62	.69	.61	.52		.84	.91	.89	.97	.57	.61	.53	.60	.67
9. W/in (4)	.43	.37	.44	.41	.61	.47	.43	.79		.83	.92	.86	.49	.71	.51	.58	.62
10. Bond (4)	.46	.48	.53	.52	.65	.53	.41	.92	.82		.77	.84	.60	.64	.60	.63	.66
11. Goal (4)	.50	.48	.57	.49	.59	.57	.48	.88	.91	.78		.87	.46	.64	.46	.56	.60
12. Task (4)	.51	.52	.66	.61	.73	.60	.53	.97	.83	.86	.87		.55	.64	.51	.59	.68
13. Btwn (8)	.19 <sup>ns</sup>	.38*	.49	.52	.67	.44*	.30 <sup>ns</sup>	.77	.70	.74	.70	.78		.82	.95	.94	.95
14. W/in (8)	.25 <sup>ns</sup>	.37*	.34 <sup>ns</sup>	.47	.60	.36 <sup>ns</sup>	.29 <sup>ns</sup>	.59	.72	.60	.67	.63	.87		.83	.90	.92
15. Bond (8)	.23 <sup>ns</sup>	.41*	.49	.53	.70	.44*	.33 <sup>ns</sup>	.74	.67	.76	.65	.74	.95	.83		.88	.90
16. Goal (8)	.20 <sup>ns</sup>	.40*	.41*	.52	.64	.43*	.33 <sup>ns</sup>	.65	.80	.67	.76	.68	.92	.95	.85		.94
17. Task (8)	.21 <sup>ns</sup>	.33 <sup>ns</sup>	.40*	.46	.60	.37*	.24 <sup>ns</sup>	.68	.64	.63	.62	.72	.95	.92	.86	.89	

<sup>a</sup> All correlations significant at  $p < .01$  level unless noted: <sup>ns</sup> = non significant, \* $p < .05$

<sup>b</sup> IS = Intersession Report Alliance subscale (Session # is in parentheses)

Btwn = CTAS between systems alliance subscale

W/in = CTAS within systems alliance subscale

Bond = CTAS bonds subscale

Goal = CTAS goals subscale

Task = CTAS tasks subscale

### *Examination of Outliers and Normality of Data*

Means and standard deviations of all scales at pretest and following session four were examined for normality and outliers. Boxplots were used to identify outliers and extreme cases, using the SPSS definition of an outlier as a data point that is greater than 1.5 times the interquartile range above the third quartile or below the first quartile. Data from all outliers were examined on a case-by-case basis to ensure accuracy of data entry. Because of the tendency outliers have to bias results and the relatively small number of outliers, outliers were deleted on all scales. Table 7 reports means and standard deviation prior to and following removal of outliers as well as measures of normality following removal. All scales appear normally distributed with no excessive skew or kurtosis.

Table 7  
*M, SD, and Estimates of the Normality of Variables Before and After Removal of Outliers*

Variable	<i>M</i>		<i>SD</i>		After removal		
	Before	After	Before	After	Skew	Kurtosis	# Outliers
OQ SD pre Male	31.87	31.02	12.66	10.75	0.09	-0.23	5
OQ SD pre Female	38.06		15.93		0.07	-0.55	0
RDAS pre Male	40.95	41.46	8.92	7.75	-0.16	-0.37	5
RDAS pre Female	37.93	37.90	9.94	9.11	0.04	-0.26	5
OQ SD time 4 Male	28.26	27.84	13.13	12.45	0.46	0.10	2
OQ SD time 4 Female	34.69	34.26	15.88	15.28	0.32	-0.27	1
RDAS time 4 Male	43.50	43.51	8.11	7.57	-0.01	-0.12	2
RDAS time 4 Female	42.07	42.35	9.17	8.77	-0.40	-0.32	1
CTAS between 4 Male	164.70		25.01		-0.09	-0.87	0
CTAS within 4 Male	59.67		10.92		-0.08	-1.04	0
CTAS between 4 Female	163.86		23.42		0.02	-0.95	0
CTAS within 4 Female	59.13		10.7		-0.21	-0.44	0
CTAS bonds 4 Male	75.99		11.26		-0.21	-1.03	0
CTAS goals 4 Male	59.68		10.71		-0.12	-0.73	0
CTAS tasks 4 Male	60.84		10.24		-0.10	-0.69	0
CTAS bonds 4 Female	74.35		10.76		-0.16	-0.87	0
CTAS goals 4 Female	59.96		9.95		-0.21	-0.33	0
CTAS tasks 4 Female	61.09		9.42		-0.01	-0.75	0

### *Correlations Between Variables in the Final Sample*

The correlation matrix for variables in the primary analyses is presented in Table 8. Correlations provide preliminary support for the hypothesis that there are actor and partner effects for females' alliance on session four distress, with significant correlations between both within and between systems alliances and female partners' own symptom and relational distress at session four as well as the relational distress of their male partners at session four. Similarly, the between and within systems alliances are associated with males' own symptom distress and relational distress at session four as well as the relational distress of their partners at session four. Males' within system alliance is also associated with their partner's symptom distress at session four. As expected, there are significant correlations between the alliance subscales of partners indicating that data are non-independent.

### *Analysis of Simple Actor-Partner Interdependence Models*

The 10 models presented in this section are concerned with the three primary research questions: (a) are there actor effects for the alliance on distress, (b) are there partner effects for the alliance on distress, and (c) does the strength of the relationship between alliance and distress differ for male and female partners? These questions are asked of two dependent variables (psychological distress and relational distress) and five configurations of the alliance (two loci: between systems and within systems alliance, and the three subscales of the content dimension of the alliance: goals tasks and bonds). Each of these models corresponds to the simple APIM presented in Figure 1 (p. 42). In each model, one configuration of the alliance is used to predict fourth session level of distress (individual or relational) along with the pre-test level of the corresponding measure of distress. These simple models have sufficient power to detect the medium effect sizes expected for the alliance. The results of the primary analyses will be

grouped according to whether individual psychological distress or relational distress is being measured.

In order to control for increased Type I error rates associated with multiple tests on the same dependent variable, alphas will be adjusted using a Bonferroni correction. As five models will be tested on each dependent variable, alpha levels of .01 (.05/5) and .002 (.01/5) will be used to gauge the significance of partial correlations in the models. Higher scores on the alliance indicate greater levels of alliance. Lower scores on the RDAS and higher scores on the SD subscale of the OQ-45.2 indicate greater levels of distress. Clinic is dummy coded with 1 representing Auburn's clinic and 0 representing UGA's clinic.

For all analyses Amos 6.0 was used to estimate the Actor-Partner Interdependence Model. Following the recommendations of authors familiar with the analysis of dyadic data (Enders & Tofighi, 2007; Kenny et al., 2006), predictor variables were centered on the grand mean across men and women.

In each of the models presented in this section, if actor effects or partner effects for the therapy alliance were significant, the following constraints were applied to the model: (a) Partner effects of husbands and wives for pre-test levels of distress were constrained to be equal, (b) actor effects of husbands and wives for pre-test levels of distress were constrained to be equal, (c) partner effects for the alliance were constrained to be equal and finally, (d) actor effects for the alliance were constrained to be equal. These constraints test the equivalence across men and women of actor and partner effects. All constrained models are compared to the saturated model. If the chi-square changes significantly, the constraints have worsened the model fit providing evidence against the equivalence of the effect for male and female partners. Sample size for all models is 173 couples.



Table 8  
Correlation Matrix Used in Primary Analyses

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	-.31**																
3	.25**	-.20*															
4	-.19*	.59**	-.23**														
5	.77**	-.17	.19	-.19													
6	-.37**	.69**	-.20	.45**	-.29**												
7	-.28**	.24*	-.11	.18	-.23*	.48**											
8	-.30**	.33**	-.15	.21*	-.28**	.62**	.84**										
9	-.28**	.29**	-.14	.21*	-.21*	.46**	.91**	.83**									
10	-.33**	.31**	-.12	.18	-.27**	.59**	.89**	.92**	.77**								
11	-.25*	.19	-.09	.16	-.23*	.47**	.97**	.86**	.84**	.87**							
12	.27**	-.16	.66**	-.02	.34**	-.25*	-.22*	-.31**	-.16	-.27**	-.27**						
13	-.41**	.30**	-.11	.64**	-.36**	.52**	.33**	.32**	.34**	.28**	.31**	-.19					
14	-.13	-.03	-.10	.01	-.13	.15	.45**	.39**	.38**	.39**	.47**	-.33**	.33**				
15	-.15	.13	-.17	.20*	-.13	.29**	.39**	.40**	.39**	.34**	.40**	-.24*	.51**	.79**			
16	-.14	.01	-.09	.07	-.08	.15	.42**	.39**	.37**	.37**	.44**	-.28**	.31**	.92**	.82**		
17	-.15	.08	-.13	.09	-.16	.23*	.45**	.40**	.39**	.39**	.46**	-.28**	.43**	.88**	.91**	.78**	
18	-.12	-.01	-.15	.05	-.13	.19	.42**	.37**	.38**	.36**	.43**	-.33**	.41**	.97**	.83**	.86**	.87**

1 = Male OQ Symptom Distress (pre)

2 = Male RDAS (pre)

3 = Female OQ Symptom Distress (pre)

4 = Female RDAS (pre)

5 = Male OQ Symptom Distress (4<sup>th</sup> session)

6 = Male RDAS (4<sup>th</sup> session)

7 = Male CTAS Between (4<sup>th</sup> session)

8 = Male CTAS Within (4<sup>th</sup> session)

9 = Male CTAS Bond (4<sup>th</sup> session)

10 = Male CTAS Goals (4<sup>th</sup> session)

11 = Male CTAS Tasks (4<sup>th</sup> session)

12 = Female OQ Symptom Distress (4<sup>th</sup> session)

13 = Female RDAS (4<sup>th</sup> session)

14 = Female CTAS Between (4<sup>th</sup> session)

15 = Female CTAS Within (4<sup>th</sup> session)

16 = Female CTAS Bond (4<sup>th</sup> session)

17 = Female CTAS Goals (4<sup>th</sup> session)

18 = Female CTAS Tasks (4<sup>th</sup> session)

### *Individual Psychological Distress*

#### *The effect of within system alliance on symptom distress.*

The results of the model examining actor and partner effects for the within system alliance on symptom distress are presented in Table 9. When controlling for the other variables in the model, the within system alliance was not significantly associated with fourth session levels of psychological distress as measured by the Symptom Distress subscale of the OQ45.2. Furthermore, no significant partner effects were found for within system alliance on psychological distress, when controlling for pre-treatment levels of symptom distress, clinic, and the actor effects of the within system alliance on outcome. As can be expected for each of the models presented below, there were significant actor effects for psychological distress at pre-test on psychological distress at session four. The effect of clinic on the female partner's session four distress approached significance. When controlling for other variables in the model, being a female client at Auburn's clinic is associated with a decrease of 4.7 points on Symptom Distress at session four when compared to clients at the McPhaul Clinic. As there were no significant actor or partner effects for the within systems alliance on distress, question 3, which examines sex differences in actor and partner effects was not tested.

#### *The effect of between systems alliance on psychological distress.*

When controlling for other variables in the model, there was a significant actor effect for female partners' between systems alliance on their own level of distress. For each one unit increase in the females' between system alliance score, there was a corresponding decrease of .18 points on the Symptom Distress subscale of the OQ-45.2. There was no significant actor effect for a male's between systems alliance on individual psychological distress. No significant

partner effects were found for the between systems alliance on psychological. The results of these analyses are presented in Table 10 below.

Table 9

*Summary of the APIM for the Effects of Within System Alliance on Psychological Distress*

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>
Actor Effects (effect of variable on <i>own</i> distress)			
Male OQ SD pretest	0.86	0.07	12.28** <sup>a</sup>
Female OQ SD pretest	0.64	0.06	10.06**
Male CTAS within	-0.01	0.08	-0.18
Female CTAS within	-0.19	0.11	-1.81
Partner Effects (effect of variables on <i>partner's</i> distress)			
Male OQ SD pretest	0.11	0.10	1.10
Female OQ SD pretest	-0.05	0.05	-1.05
Male CTAS within	-0.10	0.11	-0.95
Female CTAS within	-0.03	0.08	-0.41
Clinic (DV = male partner session 4 SD)	-2.42	1.63	-1.48
Clinic (DV = female partner session 4 SD)	-4.69	2.20	-2.13 <sup>†</sup>
Intercept (male partner session 4 SD)	33.06	1.42	23.32**
Intercept (female partner session 4 SD)	36.52	1.93	19.10**

<sup>†</sup>p <.05 \*p <.01 \*\*p<.002

<sup>a</sup>p-values have been adjusted using Bonferroni's adjustment of p/5 with a traditional alpha of .05 corresponding to an alpha of .01 and an alpha of .01 corresponding to an alpha of .002.

Table 10

*Summary of the APIM for the Effects of Between Systems Alliance on Psychological Distress*

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>
Actor Effects (effect of variable on <i>own</i> distress)			
Male partner OQ SD pretest	0.87	0.07	12.40**
Female partner OQ SD pretest	0.65	0.06	10.68**
Male partner CTAS between	0.00	0.04	0.09
Female Partner CTAS between	-0.18	0.05	-3.86**
Partner Effects (effect of variables on <i>partner's</i> distress)			
Male partner OQ SD pretest	0.14	0.09	1.49
Female partner OQ SD pretest	-0.05	0.05	-1.01
Male partner CTAS between	0.04	0.05	0.93
Female Partner CTAS between	-0.01	0.04	-0.14
Clinic (DV = male partner session 4 SD)	-2.20	1.64	-1.34
Clinic (DV = female partner session 4 SD)	-3.45	2.12	-1.63
Intercept (male partner session 4 SD)	32.92	1.42	23.18**
Intercept (female partner session 4 SD)	35.52	1.84	19.34**

<sup>†</sup>p <.05 \*p <.01 \*\*p<.002

Table 11 outlines change in chi-square when male and female partners' actor or partner effects were equated. First, the pre-test symptom distress partner effects were constrained to be equal. This constraint did not significantly worsen the model fit, suggesting no significant differences between the strength of each partners' pretest distress on their companions session 4 distress. Second, pre-test SD actor effects were constrained to be equal. This step significantly worsened model fit suggesting that the effect of a male partners' pre-test symptom distress on his own session 4 distress is significantly greater than the effect of his female partner's pretest symptom distress on her own outcome. Next, the partner effects of between systems alliance on session-four symptom distress were set equal. No significant deterioration of model fit resulted. Finally, the actor effects of male and female partners' between systems alliance on session four distress were constrained to be equal. This constraint significantly worsened the model fit. The actor effect of a wife's between systems alliance on her own distress is significantly stronger than the actor effect of her partner's alliance on distress.

Table 11  
*Nested Model Comparisons Constraining the Effects of Alliance for Male and Female Partners to be Equal (All Models Compared Against Saturated Model)*

Model	$\Delta df$	$\chi^2_{diff}$
Baseline Model	--	--
Equating SD partner effects	1	3.20
Equating SD actor effects	1	5.01*
Equating alliance partner effects	1	0.63
Equating alliance actor effects	1	9.49**

\*p < .05 \*\*p < .01

#### *Content dimension of the alliance on distress.*

Three Actor-Partner Interdependence Models were used to estimate the impact of the bonds, goals and tasks subscales of the content dimension on individual psychological distress at

session four. Results from these analyses are presented in Tables 12, 14, and 16. Similar to the between systems results, female partners' ratings of the alliance on both the tasks and the bonds subscales were significantly associated with their own fourth session psychological distress when controlling for the other variables in the model. A similar trend was seen for the goals subscale; however, results were not significant when using the Bonferroni adjusted alpha level of .01. Tables 13, 15 and 17 illustrate the effect of equating male and female partners' actor effects as well as their partner effects. In all three models, the actor effect of the alliance on fourth session distress was significantly stronger for female partners. In each model, constraining male and female alliance actor effects to be equal significantly decreased the fit of the model. In addition, the association between initial symptom distress and session four distress is stronger for males than for their partners.

Table 12  
*Summary of the APIM for the Effects of the Goals Subscale of the Alliance on Psychological Distress*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male SD pretest	0.87	0.07	12.23**
Female SD pretest	0.65	0.06	10.21**
Male CTAS goals	0.01	0.08	0.16
Female CTAS goals	-0.28	0.11	-2.44 <sup>†</sup>
Partner Effects (effect of variables on partner's distress)			
Male SD pretest	0.12	0.10	1.19
Female SD pretest	-0.05	0.05	-1.07
Male CTAS goals	-0.03	0.11	-0.28
Female CTAS goals	-0.05	0.05	-1.04
Client at Auburn's Clinic (DV = male session 4 SD)	-2.30	1.64	-1.41
Client at Auburn's Clinic (DV = female session 4 SD)	-4.21	2.19	-1.92
Intercept (male session 4 SD)	32.98	1.42	23.19**
Intercept (female session 4 SD)	36.14	1.90	18.99**

<sup>†</sup>p <.05 \*\*p<.002

Table 13

*Impact of Equating Male and Female Actor and Partner Effects on Model Fit: Goals*

Model	$\Delta df$	$\chi^2_{diff}$
Baseline Model	--	--
SD partner effects equated	1	2.40
SD actor effects equated	1	4.86*
CTAS goals partner effects equated	1	0.02
CTAS goals actor effects equated	1	4.28*

\*p &lt; .05 \*\*p &lt; .01

Table 14

*Summary of the APIM for the Effects of the Bonds Subscale of the Alliance on Psychological Distress*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male SD pretest	0.86	0.07	12.34**
Female SD pretest	0.66	0.06	10.61**
Male CTAS bonds	-0.04	0.08	-0.54
Female CTAS bonds	-0.34	0.10	-3.30**
Partner Effects (effect of variables on partner's distress)			
Male SD pretest	0.14	0.09	1.49
Female SD pretest	-0.05	0.05	-1.02
Male CTAS bonds	-0.04	0.08	0.83
Female CTAS bonds	0.04	0.08	0.45
Client at Auburn's Clinic (DV = male session 4 SD)	-2.37	1.63	-1.45
Client at Auburn's Clinic (DV = female session 4 SD)	-3.74	2.16	-1.73
Intercept (male session 4 SD)	33.09	1.42	23.34**
Intercept (female session 4 SD)	35.46	1.88	18.91**

\*\*p &lt; .002

Table 15

*Impact of Equating Male and Female Actor and Partner Effects on Model Fit: Bonds*

Model	$\Delta df$	$\chi^2_{diff}$
Baseline Model	--	--
SD partner effects equated	1	3.22
SD actor effects equated	1	4.11*
CTAS bonds partner effects equated	1	0.14
CTAS bonds actor effects equated	1	5.32*

\*p &lt; .05 \*\*p &lt; .01

Table 16

*Summary of the APIM for the Effects of the Tasks Subscale of the Alliance on Psychological Distress*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male SD pretest	0.87	0.07	12.49**
Female SD pretest	0.64	0.06	10.34**
Male CTAS tasks	0.04	0.08	0.41
Female CTAS tasks	-0.42	0.12	-3.51**
Partner Effects (effect of variables on partner's distress)			
Male SD pretest	0.13	0.09	1.39
Female SD pretest	-0.05	0.05	-1.05
Male CTAS tasks	0.04	0.08	0.41
Female CTAS tasks	-0.06	0.09	-0.59
Client at Auburn's Clinic (DV = male session 4 SD)	-2.15	1.64	-1.31
Client at Auburn's Clinic (DV = female session 4 SD)	-3.93	2.13	-1.85
Intercept (male session 4 SD)	32.90	1.42	23.18**
Intercept (female session 4 SD)	36.08	1.85	19.51**

\*\* $p < .002$

Table 17

*Impact of Equating Male and Female Actor and Partner Effects on Model Fit: Tasks*

Model	$\Delta df$	$\chi^2_{diff}$
Baseline Model	--	--
SD partner effects equated	1	2.99
SD actor effects equated	1	5.84*
CTAS tasks partner effects equated	1	0.32
CTAS tasks actor effects equated	1	9.02**

\*  $p < .05$  \*\* $p < .01$

### *Relational Distress*

*The effect of between systems alliance on relational distress.*

When controlling for other variables in the model, there was a significant actor effect for female but not male partners' between systems alliance on their own level of distress. The effect of male partners' alliance on distress showed a similar trend but failed to reach significance using the Bonferroni-adjusted alpha level of .01. As shown in Table 18, a one-unit increase in an

individual's alliance is associated with an increase of .06 units on fourth session RDAS scores for male partners and a .10 unit increase in female partners' fourth session RDAS score.

As with previous models, when controlling for pre-treatment levels of symptom distress and clinic, male partners' between systems alliance was not significantly associated with their female partner's session four levels of relational distress. The same lack of association was found between wives' between-systems alliance and their husband's relational distress.

Table 18  
*Summary of the APIM for the Effects of Between Systems Alliance on Relational Distress*

Variable	B	SE B	t
Actor Effects (effect of variable on own distress)			
Male RDAS pretest	0.66	0.08	8.01**
Female RDAS pretest	0.71	0.09	8.40**
Male CTAS between	0.06	0.02	2.36 <sup>†</sup>
Female CTAS between	0.10	0.03	3.54**
Partner Effects (effect of variables on partner's distress)			
Male RDAS pretest	-0.03	0.10	-0.27
Female RDAS pretest	0.02	0.07	0.24
Male CTAS between	0.00	0.03	0.12
Female CTAS between	0.05	0.03	1.83
Clinic (DV = male session 4 SD)	0.08	1.07	0.07
Clinic (DV = female session 4 SD)	2.12	1.31	1.62
Intercept (male session 4 SD)	42.52	0.93	45.69**
Intercept (female session 4 SD)	41.69	1.14	36.60**

<sup>†</sup>p <.05 \*\*p<.002

Four sets of constraints were imposed on the baseline model. First, the partner effects of partners pre-test RDAS score on fourth session RDAS were constrained to be equal. Second, the actor effects for pre-test RDAS were constrained to be equal. Next partner effects for the between systems alliance were equated and finally actor effects for the between systems alliance on distress were equated. Each of these constrained models was compared against the just-identified baseline model. None of these constraints significantly worsened the model fit. This



means that there were no significant differences in the strength of the relationship between pretreatment levels of relational distress and session four relational distress between male and female partners. The impact of a male's alliance on his own outcome is statistically equivalent to the impact of his partner's alliance on her own outcome.

*The effect of the within systems alliance on relational distress.*

Table 19 presents the unstandardized betas, their standard errors and critical ratios (*t* scores) for the APIM regressing male and female relational distress on pre-treatment levels of distress and the within systems alliance. Actor effects were found for both the male and female partners' within system alliance on fourth session relational distress.

Each one-unit increase in the alliance was associated with an increase of .20 and .31 on the RDAS for males and females respectively. The within system alliance of females was also associated with their partners' fourth session relational distress; however results were not significant when using the adjusted alpha level of .01.

As with the previous model, constraining partners' actor effects to be equal as well as their partner effects to be equal did not significantly worsen the fit of the model. In other words, there are no sex differences for the actor or partner effects of the alliance on distress.

*The effect of the content domains of the alliance on relational distress.*

In order to examine the effect of the content domains on distress, actor-partner interdependence models were run separately for the effects of bonds, goals and tasks on relational distress. As with the previous models, three questions were addressed: (a) are there actor effects for the content domain on distress, (b) are there partner effects for the content domain on distress, and (c) are there sex differences for the strength of the relationship between the content domain and distress for male and female partners?

Table 19.

*Summary of the APIM for the Effects of Within System Alliance on Relational Distress*

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male RDAS pretest	0.58	0.08	7.30**
Female RDAS pretest	0.65	0.08	8.22**
Male CTAS within	0.20	0.05	4.00**
Female CTAS within	0.31	0.06	5.30**
Partner Effects (effect of variables on partner's distress)			
Male RDAS pretest	-0.07	0.10	-0.69
Female RDAS pretest	0.01	0.07	0.09
Male CTAS within	0.02	0.06	0.36
Female CTAS within	0.11	0.05	2.21 <sup>†</sup>
Client at Auburn's Clinic (DV = male session 4 SD)	0.42	1.00	0.42
Client at Auburn's Clinic (DV = female session 4 SD)	2.94	1.22	2.42 <sup>†</sup>
Intercept (male session 4 SD)	42.39	0.87	48.50**
Intercept (female session 4 SD)	41.06	1.06	38.70**

<sup>†</sup>*p* < .05 \*\**p* < .002

Tables 20 through 22 present the results of the models regressing relational distress separately on the bonds, goals and tasks subscales of the alliance. Actor effects were found for both partners on the tasks and goals subscales and for female partners on the bonds subscale. When controlling for the other actor and partner effects in the model, when female partners reported higher level of bonds there was an increase in both their own dyadic adjustment as well as the adjustment of their male partner, with each one-unit increase associated with an increase of .14 points. A similar, though non-significant, trend was seen for the partner effect of the female partner's task subscale of the alliance on her companion's dyadic adjustment ( $B = 0.12$ ,  $t = 2.05$   $p = .04$ ).

The effects of male and female partners' actor and partner effects on fourth session distress were set equal. None of the constraints significantly worsened the model fit. This would suggest the effect of one partner's alliance on outcome does not significantly differ from the effect of the other partner's alliance on outcome.

Table 20.

*Summary of the APIM for the Effects of the Tasks Subscale of the Alliance on Relational Distress*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male RDAS pretest	0.66	0.08	8.25**
Female RDAS pretest	0.71	0.08	8.69**
Male CTAS tasks	0.15	0.06	2.62**
Female CTAS tasks	0.33	0.07	4.75**
Partner Effects (effect of variables on partner's distress)			
Male RDAS pretest	-0.03	0.10	-0.28
Female RDAS pretest	0.01	0.07	0.19
Male CTAS tasks	-0.02	0.07	-0.24
Female CTAS tasks	0.12	0.06	2.05 <sup>†</sup>
Client at Auburn's Clinic (DV = male session 4 RDAS)	0.04	1.05	0.03
Client at Auburn's Clinic (DV = female session 4 RDAS)	2.42	1.25	1.93
Intercept (male session 4 RDAS)	42.59	0.92	46.39**
Intercept (female session 4 RDAS)	41.38	1.09	37.87**

<sup>†</sup>p < .05 \*\*p < .002

Table 21.

*Summary of the APIM for the Effects of the Bonds Subscale of the Alliance on Relational Distress*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male RDAS pretest	0.68	0.08	8.12**
Female RDAS pretest	0.69	0.09	8.01**
Male CTAS bonds	0.09	0.05	1.80
Female CTAS bonds	0.16	0.06	2.58*
Partner Effects (effect of variables on partner's distress)			
Male RDAS pretest	-0.05	0.11	-0.44
Female RDAS pretest	0.01	0.07	0.07
Male CTAS bonds	0.07	0.07	0.98
Female CTAS bonds	0.14	0.05	2.63*
Client at Auburn's Clinic (DV = male session 4 RDAS)	0.21	1.07	0.20
Client at Auburn's Clinic (DV = female session 4 RDAS)	2.29	1.34	1.71
Intercept (male session 4 RDAS)	42.41	0.94	45.32**
Intercept (female session 4 RDAS)	41.61	1.16	35.76**

\*p &lt; .01 \*\*p &lt; .002

Table 22.

*Summary of the APIM for the Effects of the Goals Subscale of the Alliance on Relational Distress*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male RDAS pretest	0.59	0.08	7.20**
Female RDAS pretest	0.70	0.08	8.49**
Male CTAS goals	0.20	0.05	3.80**
Female CTAS goals	0.30	0.07	4.55**
Partner Effects (effect of variables on partner's distress)			
Male RDAS pretest	-0.07	0.10	-0.66
Female RDAS pretest	0.03	0.07	0.43
Male CTAS goals	-0.00	0.07	-0.05
Female CTAS goals	0.08	0.06	1.41
Client at Auburn's Clinic (DV = male session 4 RDAS)	0.26	1.04	0.25
Client at Auburn's Clinic (DV = female session 4 RDAS)	2.25	1.27	1.78
Intercept (male session 4 RDAS)	42.56	0.90	47.09**
Intercept (female session 4 RDAS)	41.55	1.11	37.59**

\*\* $p < .002$ *Analysis of Complex Actor-Partner Interdependence Models*

The final group of analyses examines research questions (4) is the within system alliance more important than the between system alliance in couple therapy and (5) do the subscales of the content dimension of the analysis account for unique variance in distress when controlling for the other subscales? Research question four was examined for both individual and relational distress using the APIM presented in Figure 2 (see p.43). This model allowed the explicit testing of the hypothesis that in couple therapy, the within system alliance exerts a stronger influence on change in therapy than does the between systems alliance. This was tested by constraining between and within system alliance partner effects to be equal for husbands, followed by actor effects for husbands, and then partner and actor effects for wives. In order to examine the relative influence of each content subscale of the alliance on both individual and relational distress, the APIM offered in Figure 3 (see p. 44) was tested using fourth session assessments scores on the

RDAS and the OQ 45.2 Symptom Distress subscale. This model allowed for the examination of the unique effect of each subscale of the content dimension when controlling for the effect of the other two subscales. Using the SEM application of the APIM, it was also possible to test whether the impact of each subscale was significantly greater than the impact of each of the other two subscales.

The drawback to including multiple alliance scales in one model is that due to the high correlations between subscales, the partial correlations between any one subscale and distress after partialling out the variance shared with the other alliance scale or scales was expected to be smaller than the partial correlations presented in the simple APIMs. With smaller effect sizes, the power of these models to detect significant results is reduced. Due to this expected loss of power, I decided against using a Bonferroni correction to adjust the alpha level for these models. Hence, alpha is set at  $p < .05$  for these more complex APIMs. Results are grouped according to the measure of distress.

### *Individual Psychological Distress*

#### *Comparison of the effects of between and within systems alliance on individual distress.*

The results obtained in the two simple APIM examining the impact of the between and within systems alliance separately were repeated in this model and are presented in Table 23. Of the possible alliance actor effects, only the female partner's own level of between systems alliance was significantly associated with her own fourth session distress when controlling for the other variables in the model. Equating her between and within systems actor effects significantly worsened the fit of the model (see Table 24), indicating that the impact of between systems alliance is particularly salient for decreases in female partners' individual distress.

Two significant partner effects emerged in the model that were not apparent in either of the simple APIMs. Both the husbands' between and within system alliances were significantly associated with their partners' fourth session level of psychological distress. These partner effects are particularly interesting. As the husband's perceived alliance with the therapist increased, so did his wife's level of individual distress. However, the opposite relationship held true for a husband's within system alliance and his partner distress. As the husband's perceived alliance with his wife increased, there was an associated decrease in his wife's psychological distress. When these two partner effects were set equal, there was a significant decrease in model fit, indicating that the husband's within system alliance contributes more powerfully to his partner's improvement than does his between systems alliance.

Table 23  
*Summary of the APIM for the Effects of the Between & Within Systems Alliance on Individual Psychological Distress*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male SD pretest	0.86	0.07	12.30***
Female SD pretest	0.65	0.06	10.82***
Male CTAS between	0.03	0.06	0.51
Female CTAS between	-0.25	0.07	-3.51***
Male CTAS within	-0.08	0.13	-0.58
Female CTAS within	0.19	0.15	1.27
Partner Effects (effect of variables on partner's distress)			
Male SD pretest	0.12	0.09	1.33
Female SD pretest	-0.05	0.05	-1.00
Male CTAS between	0.17	0.08	2.21*
Female CTAS between	0.02	0.06	0.40
Male CTAS within	-0.37	0.17	-2.17*
Female CTAS within	-0.08	0.12	-0.64
Client at Auburn's Clinic (DV = male session 4 SD)	-2.48	1.63	-1.52
Client at Auburn's Clinic (DV = female session 4 SD)	-3.22	2.07	-1.56
Intercept (male session 4 SD)	33.03	1.44	22.89***
Intercept (female session 4 SD)	35.37	1.83	19.36***

\*  $p < .05$  \*\*\* $p < .001$

Table 24

*Impact of Equating Between and Within Actor and Partner Effects on Model Fit*

Model	$\Delta df$	$\chi^2_{diff}$
Baseline Model	--	--
Male between and within partner effects equated	1	5.22*
Male between and within actor effects equated	1	0.36
Female between and within partner effects equated	1	0.38
Female between and within actor effects equated	1	4.40*

\*p &lt; .05

*Comparison of the effects of the content dimension subscales of the alliance on individual distress.*

When controlling for the effects of all other variables in the model, no content subscale accounted for any significant portion of the variance in distress. Results of this analysis are reported in Table 25. Lack of significant findings for the subscales of the content domain was true both for the actor effects of a partner's alliance on his own outcome as well as for the effect of a partner's alliance on his companion's distress. As there were no significant actor or partner effects, additional constraints were not imposed to test the equivalence of the effects of the content subscales.

*Relational Distress*

*Comparison of the effects of between and within systems alliance on relational distress.*

The model presented in Figure 2 was repeated using relational distress at session four as the outcome of interest. As shown in Table 26, when controlling for the pretest levels of relational distress and other variables in the model, the within system alliance exerted an actor effect for both male and female partners. There were no significant actor effects for the between systems alliance on relational distress for both males and females. No significant partner effects were found for between or within systems alliance. In addition, when controlling for the effects of the other variables in the model, receiving couple therapy at Auburn's clinic was associated

with an increase of 3.25 points on the RDAS for females when compared to those receiving therapy at UGA's clinic.

Table 25

*Summary of the APIM for the Effects of the Content Dimension of the Alliance on Individual Psychological Distress*

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male SD pretest	0.85	0.07	12.06***
Female SD pretest	0.64	0.06	10.43***
Male CTAS goals	-0.03	0.15	-0.21
Female CTAS goals	0.15	0.21	0.75
Male CTAS bonds	-0.16	0.13	-1.30
Female CTAS bonds	0.21	0.15	1.46
Male CTAS tasks	0.22	0.18	1.18
Female CTAS tasks	-0.47	0.26	-1.79
Partner Effects (effect of variables on partner's distress)			
Male partner SD pretest	0.14	0.09	1.48
Female partner SD pretest	-.06	0.05	-1.26
Male partner CTAS goals	-0.19	0.20	-0.97
Female Partner CTAS goals	-0.09	0.16	-0.54
Male CTAS bonds	0.23	0.17	1.38
Female CTAS bonds	-0.09	0.18	-0.50
Male CTAS tasks	-0.00	0.24	-0.02
Female CTAS tasks	-0.22	0.21	-1.04
Clinic (DV = male partner session 4 SD)	-2.38	1.69	-1.41
Clinic (DV = female partner session 4 SD)	-3.66	2.20	-1.67
Intercept (male partner session 4 SD)			
Intercept (female partner session 4 SD)			

\*\*\* $p < .001$

In order to test the relative importance of the between and within systems alliances, both partner and actor effects for the loci of the alliance on distress were set equal for both male and female partners. A summary of these constraints and the resulting change in chi-square is reported in Table 27. There were no significant differences in the partner effects of the between and within system alliance for male or female partners. The impact of the within system alliance on relational distress, however, was significantly stronger than the impact of the between



systems alliance for both partners. This provides support for the hypothesis that nurturing the within system alliance is associated with gains in couple therapy.

Table 26.

*Summary of the APIM for the Effects of the Between & Within Systems Alliance on Relational Distress*

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male partner OQ RDAS pretest	0.58	0.08	7.08***
Female partner OQ RDAS pretest	0.64	0.08	7.99***
Male partner CTAS between	-0.02	0.04	-0.55
Female Partner CTAS between	-0.04	0.04	-0.82
Male CTAS within	0.24	0.08	2.92**
Female CTAS within	0.38	0.09	4.07***
Partner Effects (effect of variables on partner's distress)			
Male partner OQ RDAS pretest	-0.08	.10	-0.76
Female partner OQ RDAS pretest	0.01	0.07	0.09
Male partner CTAS between	-0.02	0.04	-0.57
Female Partner CTAS between	-0.01	0.05	-0.14
Male CTAS within	0.04	0.11	0.39
Female CTAS within	0.15	0.08	1.94
Clinic (DV = male partner session 4 SD)	0.64	1.04	0.61
Clinic (DV = female partner session 4 SD)	3.25	1.27	2.57**
Intercept (male partner session 4 SD)	42.22	0.88	47.79***
Intercept (female partner session 4 SD)	40.81	1.07	38.12***

\*\*p <.01 \*\*\*p <.001

Table 27

*Impact of equating between and within actor and partner effects on model fit*

Model	$\Delta df$	$\chi^2_{diff}$
Baseline Model	--	--
Male between and within partner effects equated	1	0.11
Male between and within actor effects equated	1	5.34*
Female between and within partner effects equated	1	2.16
Female between and within actor effects equated	1	8.99**
Male within partner and female within partner equated	1	1.05

\*p <.05 \*\*p <.01

Table 28

*Summary of the APIM for the Effects of the Content Dimension of the Alliance on Relational Distress*

Variable	<i>B</i>	<i>SE B</i>	<i>t</i>
Actor Effects (effect of variable on own distress)			
Male RDAS pretest	0.60	0.09	7.01***
Female RDAS pretest	0.72	0.08	8.90***
Male CTAS goals	0.24	0.10	2.42*
Female CTAS goals	0.16	0.12	1.33
Male CTAS bonds	-0.03	0.08	-0.37
Female CTAS bonds	0.01	0.09	0.13
Male CTAS tasks	-0.04	0.12	-0.32
Female CTAS tasks	0.36	0.15	2.36*
Partner Effects (effect of variables on partner's distress)			
Male partner RDAS pretest	-0.10	0.10	-0.95
Female partner RDAS pretest	0.04	0.07	0.56
Male partner CTAS goals	0.07	0.12	0.54
Female Partner CTAS goals	-0.04	0.11	-0.34
Male CTAS bonds	0.06	0.10	0.62
Female CTAS bonds	-0.19	0.11	-1.76
Male CTAS tasks	-0.12	0.15	-0.83
Female CTAS tasks	0.14	0.13	1.07
Clinic (DV = male partner session 4 SD)	0.23	1.07	0.22
Clinic (DV = female partner session 4 SD)	2.57	1.27	2.03*
Intercept (male partner session 4 SD)	42.59	0.91	46.78***
Intercept (female partner session 4 SD)	41.08	1.08	37.92***

\* $p < .05$  \*\*\* $p < .001$

*Comparison of the effects of the content dimension subscales of the alliance on relational distress.*

To compare the relative effects of the goals, bonds, and tasks subscales of the alliance on relational distress, the model presented in Figure 3 was estimated using RDAS score following session four as the dependent variable. Results are presented in Table 28. Only the tasks subscale for females and the goals subscale for males accounted for additional variance in distress when controlling for the effects of the other content dimension subscales and pretreatment levels of distress. For male partners, each one-unit increase in the goals subscale was associated with a .24 unit increase in the RDAS total score. For female partners higher ratings of the tasks component

of the alliance were associated with increased dyadic adjustment at session four. Table 29 summarizes the effect on model fit when the effects of bonds, goals and tasks were equated. Equating the actor effects of male partners' goals and bonds lead to a significant deterioration of model fit. Similarly, equating the effect of wives' tasks and bonds subscales led to a near significant chi-square change of 3.09. Agreement on the goals and tasks of therapy appears to be more important to decreases in relational distress than the affective bond component of the alliance.

Table 29  
*Impact of equating bonds, goals and tasks actor and partner effects on model fit*

Model	$\Delta df$	$\chi^2_{diff}$
Baseline Model	--	--
Male bonds = male goals	1	3.89*
Male bonds = male tasks	1	0.00
Male tasks = male goals	1	1.79
Female bonds = female goals	1	0.88
Female bonds = female tasks	1	3.09
Female tasks = female goals	1	0.43

\*p < .05

## CHAPTER 5

### Discussion

#### *Summary of Key Findings*

The objective of this research was to examine the therapeutic alliance in couples therapy using an analytic strategy that would permit the testing of systemic hypotheses. Previous research examining the alliance in couple therapy has done so using the individual as the unit of analysis, creating problematic mean scores or difference scores to examine the dyadic nature of the alliance. This is the first study to examine the alliance using a model that can adequately test the systemic nature of the alliance proposed by Pinsof. Five questions were asked for each of the two outcomes of interest: distress in the couple relationship and individual psychological distress. The first of these questions explores the relationship between an individual's alliance and his own outcome (actor effect). These actor effects have been the primary mode of examining the alliance in couple therapy. One purpose of this study has been to replicate the results of previous studies while controlling for the effects of the partner. The second question examines the link between an individual's alliance and the distress of his partner (partner effect). Pinsof (1994) has suggested that the alliance is a systemic construct with the actions of each partner influencing the development of the other's alliance and in turn influencing not only her own outcome but that of her partner as well. This study is the first to examine this proposition. The third question addresses whether the strength of these actor and partner effects are equivalent for male and female partners. The fourth research question refers to the relative importance of the within and between systems alliance. The last research question addresses the

relative impact of the bonds, goals and tasks on distress. The primary findings will be discussed using these five questions as the guide.

#### *Actor Effects of Alliance on Distress*

Results of the analyses provide support for actor effects of the alliance on early improvements in level of relational distress. Actor effects were found for both male and female partners for the between systems alliance and within system alliance on relational distress. Actor effects were also evident for the content dimension subscales. In particular, this study provides support for the association between the tasks and goals subscales of the alliance and relational distress for both men and women. Actor effects were also evident for female partner's bond subscale on relational distress. In each case, increased alliances were associated with increased relational satisfaction at session four. This was true controlling for location of the clinic, pre-test levels of dyadic adjustment, as well as the other actor and partner effects of alliance in the model. These results are consistent with previous research that has demonstrated a connection between alliance and marital satisfaction (Bourgeois et al., 1990; S. M. Johnson, 1996). These previous studies have shown actor effects for the alliance measured early in the process of therapy on marital satisfaction at termination and follow-up. The current study demonstrates that this effect occurs throughout the therapy process and is active as early as the fourth session. This is consistent with recent research by Knobloch-Fedders (2007).

These results are notable for a number of reasons. First, unlike some studies, these actor effects of the alliance on outcome were found when controlling for pretreatment levels of distress. Unlike previous studies, these effects emerged in the context of a dyadic analysis that controlled not only the actor effects of an individual's pre-treatment distress but also the effects of that individual's partner's level of distress and alliance on session four distress. As Cook and

Kenny note (2005) any model that posits a dyadic effect but does not include partner effects in the model is by default assuming that no partner effect exists. Actor effects in the context of couples should always control for the effect of their partner (Cook & Kenny, 2005). The extent of the control in this study provides the strongest case in the literature to date that there is an actor effect for the alliance of both male and female partners on relational distress.

The actor effect for alliance on individual psychological distress was less consistent. Actor effects were present for the influence of the between systems alliance, as well as the tasks and bonds subscales of the alliance for female partners only. No actor effects were found for males' or females' within system alliance on distress. The actor effect for female partners on psychological distress replicates the large number of studies in individual therapy connecting strong therapeutic alliances with decreased levels of distress. This result stands in contrast to the only other study in couple therapy which showed no relation between the alliance and psychological distress for both males and females (Knobloch-Fedders et al., 2007). The discrepancy between the effect of the alliance on relational and psychological distress will be discussed later.

#### *Partner Effects of Alliance on Distress*

One of the primary contributions of this study is that it is the first to test the proposition that the alliance of one member of the couple exerts a partner effect on the outcome of the other member. While these partner effects were predicted in the alliance literature, they were generally not supported by the results of this study. There were only three significant partner effects in the models that were tested. Females' bonds subscale was significantly associated with their partners' relational distress as measured by the RDAS. As wives were able to form significant affective bonds with both the therapist and their partners, their companion's relational distress

was decreased. Females' within system alliance and tasks subscales appear to be related to their partners' decreased relational distress but did not reach the Bonferroni corrected alpha level set for this study. This was true when controlling for the actor effects of the male partners' pre-test relational distress as well as the actor effect of his own alliance on session four distress. This suggests that for males, improved relationship functioning at session four is a function of both his own rating of the within system alliance as well as his partner's rating of the within system alliance. The model of alliance proposed by Pinsof suggests a circular and reciprocal interaction between partners' alliance. The significant partner effect for wife's alliance on husband's distress provides preliminary evidence to support this claim.

When examining the between and within systems alliances simultaneously, two other partner effects emerged. As a husband's alliance with the therapist increased so did his wife's individual psychological distress. The opposite relationship was found in relation to the husband's alliance with his partner. As the husband reported an increased alliance with his partner, his wife's symptom distress was ameliorated. One possible explanation for this effect is that it is due to the formation of split alliances. In couples where the husband is forming an alliance with the therapist at the expense of his wife, her symptoms increase. In couples where the partners come together to form a strong within systems alliance, her distress diminishes. Another way to talk about this is neutrality. When the therapist is seen as being on the husband's team the wife's distress is increased. When the therapist helps the clients join together, it is decreased. Another alternative not tested in this study, is that most therapists at both clinics are young females. The increase in wives' psychological distress may be a result of seeing their husbands develop a strong relationship with another woman. When this does not occur in the context of a strong within system alliance, the relationship between a young female therapist and

their husbands may further exacerbate these wives' distress. These are all speculations however, and were not explicitly tested in this study.

Despite these interesting results, it is troubling that significant partner effects occurred in only 2 of 14 models. There are at least four possible explanations for failure to find the hypothesized relationship in the other twelve models. First, it is possible that there is indeed no relationship between one partner's alliance and her partner's distress. Second, it is possible that the impact of a partner's alliance on the other's distress is partially or completely mediated by the other partner's alliance. In this model, a husband's alliance influences his wife's outcome indirectly through an impact on his wife's alliance. An example of this would be a wife who drags her reluctant partner into marital therapy. As she views her husband establish a positive therapeutic alliance with the therapist, her own alliance may increase. The increase in her alliance, in turn, leads to a decrease in her distress. A third possible explanation for failure to find the expected partner effects is a lack of statistical power to detect small effects. After partialling out the effect of pre-test levels of distress and the alliance actor effect, the actual effect size of the partner alliance effect may be too small to detect with the current sample. Finally, this failure to find significant partner effects may be due to the measurement of the alliance. The CTAS may not be sensitive enough to capture the nuances of the alliance. Further research is needed to explore this issue in greater detail.

#### *Sex Differences in the Effect of Alliance on Distress*

In all models with significant actor or partner effects, a series of model constraints was imposed equating males' and females' actor and partner effects. If these constraints worsened the model fit, the inference is that there are, indeed, significant differences between sexes with regard to the effect of the alliance on distress. Sex differences were only found for the models



regressing symptom distress on the alliance. Female partners' between system alliance as well as the bonds, goals and tasks subscales of the alliance were all significantly related to distress. In each of these models, female partners' actor effects for alliance on distress were significantly stronger than their husband's actor effects on distress. Due to the high correlations between these alliance subscales, these four results may best be conceptualized as representing one underlying finding rather than four distinct results. As several authors (Knobloch-Fedders et al., 2004, 2007; Mamodhoussen et al., 2005) point out, there is no theoretical reason to explain differential effects of alliance on outcome. Rather than attempting to provide a conceptual reason for this difference, I will instead offer a methodological one. The mean pre-session symptom distress scores were 38 for wives and 31 for husbands. The cut-off for distinguishing distressed from non-distressed samples on the SD subscale of the OQ is 36 with higher scores indicating greater distress. The differential effect of the alliance on outcome for men and women on symptom distress may be more of a reflection of greater distress at intake among women rather than a reflection of different sex linkages between alliance and outcomes. The significant difference between husbands' and wives' actor effects for pretreatment symptom distress on session four distress supports this notion. Male partners' symptom distress is less likely to change from sessions one to four than their partners.

Of greater interest than the one difference that was found, is the overall lack of differential sex effects between alliance and outcome in 9 of the 10 models in which sex differences were tested. Previous studies have produced mixed results regarding sex differences in the effect of alliance on outcome with some finding effects for husbands but not wives and others finding effects for wives but not husbands. These studies have based their conclusion on either a comparison of regression coefficients obtained via separate regressions for men and

women, or a comparison of the correlation coefficients between alliance and outcome for men and women (Bourgeois et al., 1990; Quinn et al., 1997). The conclusion of sex differences in these studies was not based on statistical comparison but rather on the researchers' assessment of the differences. In some cases, it was assumed that since the regression weight for males was significant while the weight for females was not significant the difference between males and females must also be significant. As the results of the current study demonstrate, the alliance of a partner may be significantly different from 0 (the test of significance employed in regression) but not significantly different from the estimate of her partner.

More recently, Knobloch-Fedders, Pinsof and Mann (2007) argued for sex differences based on comparisons of mean marital satisfaction change scores between couples in which the husband had a higher alliance and those in which the wife's alliance was higher at the eighth session. They found greater change in the wife's marital distress in couples with husband-higher alliances. While an improvement over the visual comparison of regression coefficients, t-tests do not allow for the control of important variables such as pre-test levels of distress nor early alliance which covary with later alliance scores and which may better explain changes in marital distress.

One of the benefits of the current design is that testing these sex differences statistically was possible. The overall lack of sex differences suggests that the path from alliance to outcome is not significantly different for men and women. Rather than continuing to search for sex differences in the formation of the alliance and the relationship between alliance on outcome, researchers might be better served by directly measuring the variables they have attempted to use sex as a proxy for. For example, earlier I suggested that one reason for sex differences in the formation of the alliance could be differing comfort levels with the therapy process for men and

women. Rather than examining this indirectly using sex as a stand-in variable for comfort in therapy, researchers should attempt to measure these variables of interest directly.

#### *Differential Effects of the Between and Within Systems Alliances on Distress*

Recently, many authors have pointed to the importance of the within system alliance to success in couple therapy. Outside of the alliance literature, authors have argued that it is the ability to work with the couples' relationship in session that is at the heart of couple therapy (S. M. Johnson, 1996). The results of this study suggest that the within and between systems alliances act on different outcomes. It appears that a strong within system alliance is primarily associated with improvements in relational distress while a strong between systems alliance is primarily associated with decreases in individual psychological distress. These findings support the argument that couple therapy leads to improvement by working with the couple's relationship with each other rather than the relationship between individuals and the therapist.

This study adds to the support for the importance of the within system alliance to improvement in relational distress but not individual distress. For both male and female partners, a strong within system alliance was predictive of improved relational functioning. For female partners, the actor effect of the alliance they form with the therapist exerts a more powerful influence on their individual psychological distress than does the alliance they form with their partner. However it is interesting to note that, when controlling for this effect, the husbands' perception of the within system alliance is also important to her distress. As males' within system alliance increases, their partners' distress decreases. However, as males' between systems alliance increases so does their partners' distress. This suggests that a particularly dangerous scenario in therapy is one in which the therapist aligns with the male partner while not fostering the within system alliance. The model examining differences in the impact of between and

within systems alliance on relational distress provides further support for the importance of the within system alliance. For both partners, the within system alliance is more strongly associated with improvement in the relationship than the between systems alliance. It appears that in couple therapy, the within system alliance is particularly important to the amelioration of relational distress.

This does not mean that the relationship between individuals and the therapist is not important. The relationship between the between systems alliance and individual distress found in this study suggests that in order for couple therapy to be successful at both the individual and relational levels, therapists need to forge a delicate balance between developing a strong relationship with each partner while simultaneously helping the couple develop a strong working relationship with each other. This finding provides support for models such as Emotionally Focused Therapy (S. M. Johnson, 1996) that work toward change at both the intrapersonal and interpersonal levels.

An interesting finding is that alliance was associated to a greater degree with change in relational distress but not individual psychological distress. Similar results were reported recently by Knobloch-Fedders, Pinsof and Mann (2007) using differing instruments to measure individual and relational distress. Relational distress is a dyadic variable, with strong correlations between the distress of both partners. In order for a strong within system alliance to develop, partners must agree on the goals of therapy, the tasks by which these goals will be accomplished and must develop a working bond to accomplish these tasks. The development of such a relationship may provide hope for couples and act as a first step toward resolving difficulties in their relationship outside of the therapy room. Indeed, helping couples develop a within systems alliance may be isomorphic to improvement in marital satisfaction. In a recent review of the process research

literature from empirically supported treatment models (Childs, Anderson, Templeton, Slater, & Johnson, 2003), the authors found that a relational shift was an important component of every empirically supported model. The development of a strong within system alliance may be a necessary precursor to such a relational shift. As the couple begins to change their conceptualization of the problem from an individually focused linear process to a dyadic circular conceptualization, they may begin to soften toward each other. This process has been suggested by S.M. Johnson (1996) as well as others (Liddle, 2002).

Caution is advised when interpreting these results as causality cannot be inferred from this study. Since the measure of alliance was completed at the same time as the measure of distress, the effect may be due to a halo effect rather than a causal relationship. While support was demonstrated earlier for the stability of the alliance from session two through session eight, and while this stability has been demonstrated in previous studies, lack of perfect covariance between the intersession report alliance scale and the CTAS scales opens the door for the possibility that the relationship between alliance and relational distress is spurious or that the direction of effect has been misspecified.

#### *Differential Effects Among the Bond, Goals and Tasks Components of the Alliance on Distress*

The final research question was concerned with differential effects of the content dimension subscales of bonds goals and task on outcome. Like other studies, the correlations between the bonds, goals and tasks subscales were very high, ranging from .85 to .89. This study found a relationship between bonds, goals and tasks for males and females and distress when examined separately. However, when these subscales are modeled simultaneously and their common effect partialled out, only the husbands' goals subscale and the wives' tasks subscales are significantly associated with changes in distress. This is consistent with previous studies that

have also found that the tasks and goals aspects of therapy are associated with marital satisfaction (S. M. Johnson & Talitman, 1997; Symonds & Horvath, 2004). It appears that during the early sessions of couple therapy, the affective bond that is formed between the couple and the therapist is less important than the husband's belief that the goals of therapy are relevant to his problems and the wife's perception that the tasks of therapy are relevant to their distress.

This fits with how Pinsof (1994) has described the relative importance of differing elements of the alliance. Pinsof stated that most couples would enter therapy without knowing anything about the therapist. Initially, the therapist will need to form a strong alliance on the tasks and goals of therapy to compensate for the lack of this affective bond. As therapy progresses and this bond is developed, Pinsof hypothesizes that the therapist will then be able to offer tasks that the clients are unsure of or that produce anxiety or modify the goals of therapy. This study could be replicated using the alliance measured later in therapy to examine whether the bonds component of the alliance becomes more important as therapy progresses.

#### *Other Findings Relevant to the Study of the Alliance*

The primary purpose of this study was to examine actor and partner effects of the alliance on progress in early therapy as well as to examine any differential outcomes based on sex and between various configurations of the alliance. This study contributes to the alliance literature in other ways as well. First, this study found further evidence for the validity of the intersession alliance scale. It also found evidence for the stability of the alliance during the initial eight sessions of therapy, it contributed to the literature regarding alliance and continuance in therapy, and provided further information regarding the between and within systems subscales of the CTAS.

In an initial validation of the intersession report (L. N. Johnson et al., under review), the alliance subscale demonstrated moderate correlations ( $r = .29$ ) with the fourth session CTAS total score. The current study examined a larger sample and excluded couples seeking premarital therapy. The second session intersession alliance scale was moderately to strongly related to fourth session alliance as measured by the CTAS between and within systems alliance subscales for both males (between  $r = .47$ , within,  $r = .32$ ) and females (between  $r = .52$ , within  $r = .43$ ). This provides further evidence for the validity of this two-item measure of the alliance. In situations where the length of the CTAS or other self-report alliance scales may be prohibitive, this two-item scale appears to be an adequate measure of the alliance.

Strong correlations between the intersession alliance scales administered prior to sessions two through eight also provide evidence for the stability of the alliance during early to mid-treatment. Correlations were particularly strong during the first four sessions of therapy with weakening correlations as time progressed. The weakening correlations may also suggest that while the core of the alliance remains stable there are fluctuations in the alliance across time. This is in line with past research which documents both the stability and fluctuation of the alliance (Knobloch-Fedders et al., 2007).

These authors also found that those with lower first session alliances were more likely to drop out of therapy. The results of the present study found no difference in the alliance between those who dropped out of therapy prior to the fourth session and those who continued in therapy. However, it is important to note that this analysis did not include fifty couples who only attended the first session of therapy, dropping out prior to the administration of the first intersession report. It is likely that those not returning for therapy were unable to form a positive therapeutic alliance. The link between alliance and dropout as well as the stability of the alliance has an

important clinical ramification. It appears that when it comes to the alliance, first impressions are long lasting. During the first session, therapists should focus on establishing a strong therapeutic alliance with both partners.

In addition to the stability of the intersession alliance scores, this study also provided further information on the reliability of the between and within systems subscales of the CTAS. Both the between and within subscale were reliably measured and demonstrated high internal consistency. Both subscales were also normally distributed. While normally distributed, the scales were centered in the upper end of the possible continuum and exhibited a slight ceiling effect, as evidenced by truncated scores at the upper end of the continuum. This distribution has been shown in other samples using the total score of the alliance as well the content domain subscales (Heatherington & Friedlander, 1990). In this sample the average item score for men and women was over 5.6 on the between systems subscale and near 5.4 on the within system subscale. Response possibilities ranged from 1 to 7 with higher scores indicating greater alliance. It is apparent that clients are either unwilling to provide a negative evaluation of their therapist or that the CTAS is unable to distinguish between differing levels of a “good” alliance. Another possibility is that those with low alliance scores self-select out of studies by dropping out of therapy. While this self-selection process is probable, studies that have administered a measure of the alliance immediately following the first session have also found high mean alliance scores, suggesting that even those who drop out of therapy are unlikely to provide a negative assessment of the alliance as it is currently measured.

### *Clinical Implications*

The first clinical implication of this study is that the working alliance is, in fact, important to the early improvement in distress in couple therapy. The effects of the alliance on



distress are for the most part the result of actor effects rather than partner effects. This confirms the common sense knowledge of clinicians who will not be surprised that the success of therapy is improved when a strong alliance exists. This study offers other findings that will be beneficial to clinicians. First, couple therapists will benefit by helping the couple establish a strong within system alliance. Second, when deciding which content area of the alliance to develop, these results suggest that developing an agreement on the goals of therapy with the husband and on the tasks of therapy with the wife will best lead to decreases in relational distress. Finally, this study points to very few sex differences in the impact of the alliance on outcome.

Marriage and family therapists have pointed to our ability to foster change in families by treating the relationship rather than individuals. This study provides support for the notion that the relationship between partners is more important than the relationship between the couple and the therapist. The within systems alliance is particularly important in improving the dyadic adjustment of the couple. In fact, it appears that at times the development of a strong alliance between a husband and the therapist can be detrimental to the individual functioning of his partner. While controlling for the effect of the wife's alliance on her own outcome and her own pretreatment levels of distress, when husbands developed strong alliances with the therapist, their wives' distress increases. The opposite relationship exists when a husband perceives a strong within system alliance. As marital therapists work with their clients, they should focus their efforts helping the couple develop a strong working alliance. Therapists can develop strong individual alliances with the members of the system as well, but these should be developed in the context of a strong within systems alliance. During the first sessions, therapists who are able to take the differing problem narratives and differing ideas on the goals and tasks of therapy of the

individual partners and reframe these as goals and tasks that both partners can agree to can expect improvement for both partners.

Agreement on the goals and tasks of therapy appears to be more important than a strong affective bond in the early sessions of therapy. This has been demonstrated in previous studies, although with less statistical validity. During the early stages of therapy, couples therapists can focus their energy less on being liked by the clients and more on establishing clearly articulated goals that both partners agree on and clearly articulating the way the tasks of therapy will facilitate these goals. While this study did not find evidence for the relative importance of the bond component of the alliance, this may be due to the possibility that establishing an affective bond takes longer to develop. As therapy progresses, it is likely that the bonds component of the alliance will become more important and allow more therapeutic flexibility in terms of the tasks and goals of therapy. The development of a strong bond may be impossible, however, if the therapist and couple cannot agree upon a common goal and reach a consensus on the tasks of therapy that will be employed to reach this goal.

One final implication is a general lack of sex differences for the impact of the alliance on distress. Different authors have argued for the importance of forming an alliance with the husband while others have argued for the importance of forming an alliance with the wife. This study is the first to examine empirically the relative strength of the relationship between alliance and outcome based on sex. The results of this study can be used to show that if couple therapists are concerned with decreasing levels of relational distress, the influence of the alliance is equivalent for husbands and wives. Rather than attempting to establish a strong alliance with one partner, the results of this study suggest that clinicians should help their clients form a strong therapeutic alliance with each other.

### *Limitations*

While this study has contributed to the literature on the alliance in couple therapy by offering a dyadic test of five propositions in the alliance literature, there are several limitations to the generalizability and validity of the results. These limitations include the timing of the alliance measure, the assumption that data is missing at random, generalizability due to the university based sample and finally the construct validity of the alliance measures.

First, as discussed previously, this research used a measure of the therapy alliance taken at session four to predict measures of distress also administered at session four. While both this and previous research has demonstrated that the alliance is a stable construct, it remains plausible that the direction of effects are misspecified, or that a halo effect accounts for the covariance of alliance and distress.

Second, this study relied on full information maximum likelihood estimation (FIML) to account for the missing data that occurred in roughly one third of the final sample. FIML assumes that covariates of missingness are included as predictors in the model. In this study, only the clinic at which clients were seen was predictive of missingness. While the location services were received was included in all models, it is possible that other variables related to missingness were not included, thereby biasing the estimates.

Another limitation that affects the generalizability of the results of this study is the population studied. All therapists were student interns providing treatment at two university clinics in the Southeastern United States. Furthermore, the clients that self-selected into these training clinics were primarily White with modest incomes. Prior studies have pointed to a positive correlation between therapist experience and alliance formation (Davenport & Ratliff,

2001; Raytek et al., 1999) making generalization of the current findings to experienced therapists with differing clientele inadvisable.

Perhaps the greatest limitation of this and other studies of the alliance is the construct validity of the measures of the alliance. A key assumption made in this study is that the alliance is a stable construct. This assumption was tested by examining the correlation between the Intersession Report alliance subscale across sessions. The construct validity of this measure has only been examined in one unpublished study (L. N. Johnson et al., under review). While the present study added further support to this, it is important to note that the current study uses the same population of clients as Johnson and his colleagues and thus should not be seen as an independent replication. This measure is a two-question measure of the alliance and does not purport to capture the intricacies of the alliance as set out by Pinsof (1994).

The construct validity of the CTAS is also questionable. In this study, as in all others, the subscales of the alliance are highly correlated suggesting that the instrument is not able to capture the conceptual distinctions of the subscales. Furthermore, the between and within systems alliances are also highly correlated. This poses a major limitation to research on the alliance in couple therapy. It leads to the question of whether our current measures are adequately capturing the intricacies of the alliance as laid out in alliance theory, or a more global satisfaction with therapy. The fact that many of the CTAS subscales accounted for additional variance when controlling for the other subscales in this study indicates that these subscales do measure distinct but closely related elements of the alliance. Further measurement research should be conducted on the CTAS to further differentiate these subscales. Another critique of the CTAS is that clients consistently rate the alliance very positively, suggesting that the instrument

may not be able to adequately capture true variations in the alliance. Improving the measurement of the alliance is a crucial step in furthering the research and theorizing of this important concept.

One way to improve the measurement of the alliance is to use independent observers to rate behavioral indicators of the alliance. This may potentially lead to an ability to capture greater variation in the alliance. It would also allow for greater objectivity and standardization of the alliance scores. Friedlander and her associates (2006) have begun this process by developing the SOFTA, an observer rated alliance measure.

Despite its limitations, this study has contributed to the alliance in couple therapy literature by providing the first test of the impact of one partner's alliance on the other partner's distress. It has also provided the strongest evidence to date for the effect of an individual's alliance on her own distress, by controlling for both actor and partner effects of the alliance on outcome. This study has also provided the strongest evidence to date for the lack of differential alliance effects on outcome based on sex. The estimation of the actor-partner interdependence model using structural equation modeling techniques also allowed for the examination of the relative importance of the within systems alliance as well an examination of differential effects on the bonds, goals and tasks subscales on distress. By using dyadic analyses, we were able, for the first time, to examine the dyadic conceptualization of the alliance proposed in the literature.

#### *Future Directions*

The limitations previously discussed can be addressed in future studies. Predictive validity for the alliance should be further tested using alliance measured earlier in the therapy process on post-test measures of distress using the actor partner interdependence model. This model can also be used to replicate the results of previous studies addressing the potential predictors of alliance. Research on the alliance, specifically, and couple therapy in general,

would be well served to broaden clinical research to include licensed couple therapists and a broader more representative clinical sample.

The current project has examined the alliance using the couple rather than the individual as the unit of analysis. Using the actor partner interdependence model, I was able to examine individual and partner effects of alliance on outcome simultaneously. The continued use of dyadic analyses was the first of five recommendations to improve the research and theory of alliance I offered after reviewing the alliance literature. By using such analyses, researchers can address the systemic propositions laid out by Pinsof. Four other suggestions regarding alliance research and theory bear repeating: First, as has been addressed earlier, measures of the alliance should undergo rigorous investigation and improvement to ensure that they are adequately measuring the unique aspects of the alliance. More work is needed to refine the CTAS to better measure the content dimension of the alliance. Pinsof has articulated some interesting propositions regarding the conceptualization of the bonds, goals and tasks that are not being measured using the CTAS. The rigor that Friedlander, Escudero, Horvath and their research team (2006) have employed in the recent development of the System for the Observation of the Family Therapy Alliance (SOFTA) is a welcome step in the right direction.

Perhaps most importantly, research on the alliance in couple therapy will benefit from a clear articulation of a conceptual model for both the formation of the alliance and its effect on outcome. At its best, research is grounded in theory with results feeding back into and improving the theory. When no conceptual model is articulated, research, including the current study, can do little to improve and refine the model. Using Doherty and colleagues (1993) typology, research on the alliance currently exists at the empirical generalization level—with research findings from one study linked to those from other studies with only brief references to more

general ideas. Articulation of the causal associations between predictors of alliance, as well as the paths by which alliance may influence short and long-term outcomes will contribute enormously to the study of the alliance.

Closely related to the articulation of a conceptual model is the recommendation that variables for inclusion in the models should arise from theory rather than convenience. A well-articulated conceptual model will provide researchers with proposed paths to be tested thus reducing the number of well-intentioned but conceptually deficient variables that have been included in past research on the alliance.

Theoreticians can derive this conceptual map or it can be derived inductively using process research to examine how the alliance is formed and maintained in couple therapy. By initiating this focus on process research early in its examination of the alliance, the field of couple therapy can learn from the mistakes made in individual therapy and provide information that will directly benefit clinicians rather than focusing solely on the predictive validity of the alliance (Safran & Muran, 2006).

### *Conclusion*

The current study has advanced the study of the alliance in couple therapy by examining the alliance, a dyadic construct, with the appropriate analytical methods. In the mid 1980's Pinsof and Catherall (1986) introduced the alliance to the field of couple and family therapy. The key distinguishing feature of the alliance in couple therapy is the existence of multiple alliances. Questions such as whose alliance is most important, how do split alliances impact the outcome of therapy, in what ways do the alliances of partners interact to determine outcome are all dyadic questions that can only be appropriately analyzed using strategies that account for the dyadic nature of the data. This study has begun this process by examining the actor and partner effects

of the alliance on outcome. It has provided the strongest evidence to date for the effect of an individual's alliance on early changes in his own distress. It has also provided strong evidence against sex differences in the effect of alliance on outcome by examining these proposed differences empirically. Using a dyadic analysis, the importance of the within system alliance for improvement in relationship functioning and the between systems alliance for improvement in individual functioning has emerged. Finally, this study has provided initial evidence for the impact of a husband's alliance on his partner's early change in individual distress as well as the importance of a wife's alliance on her partner's change in relational distress. Perhaps the greatest contribution of this study is the introduction of the actor partner interdependence model to the study of the alliance in couple therapy. As researchers begin to use dyadic analyses, they will begin to better understand the alliance in couple therapy. Two decades after Pinsof and Catherall first introduced the alliance to couple therapy, research on the alliance is beginning to proliferate. As this research and theorizing on the alliance continues it is my hope that we can continue to address the systemic propositions that make the alliance in couple therapy a unique and exciting construct.



## References

- Abend, S. M. (2000). The problem of the therapeutic alliance. In S. T. Levy (Ed.), *The therapeutic alliance* (pp. 1-16). Madison, CT: International Universities Press.
- Abouguendia, M., Joyce, A. S., Piper, W. E., & Ogrodniczuk, J. S. (2004). Alliance as a mediator of expectancy effects in short-term group psychotherapy. *Group Dynamics: Theory, Research, and Practice*, 8(1), 3-12.
- Anderson, S. R., Johnson, L. N., Childs, N. M., & Ketring, S. A. (2005). *Antecedents of change in marital sentiment: A process study*. Paper presented at the Annual meeting of the American Association for Marriage and Family Therapy.
- Anderson, S. R., Templeton, G. B., Johnson, L. N., Childs, N. M., & Peterson, F. R. (2006). *Enactments and connection in couple therapy: A process study*. Paper presented at the Annual meeting of the American Association for Marriage and Family Therapy.
- Arbuckle, J. L. (2003). *Amos 5.0 Update to the Amos User's Guide*. Chicago IL.: Smallwaters Corporation.
- Beck, M., Friedlander, M. L., & Escudero, V. (2006). Three perspectives on clients' experiences of the therapeutic alliance: A discovery-oriented investigation. *Journal of Marital & Family Therapy*, 32(3), 355-368.
- 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* (Vol. 5, pp. 227-306). New York: John Wiley & Sons Inc.

- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16(3), 252-260.
- Bordin, E. S. (1994). Theory and research on the therapeutic working alliance: New directions. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory research, and practice* (pp. 13-37). New York, NY: John Wiley & Sons.
- 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.
- Bringle, R. G., & Byers, D. (1997). Intentions to seek marriage counseling. *Family Relations: Interdisciplinary Journal of Applied Family Studies*, 46(3), 299-304.
- 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.
- Catherall, D. R., & Pinsof, W. M. (1987). The impact of the therapist's personal family life on the ability to establish viable therapeutic alliances in family and marital therapy. *Journal of Psychotherapy & the Family*, 3(2), 135-160.
- Chen, E. C., & Bernstein, B. L. (2000). Relations of complementarity and supervisory issues to supervisory working alliance. *Journal of Counseling Psychology*, 47(4), 485.
- Childs, N. M., Anderson, S. R., Templeton, G. B., Slater, L. M., & Johnson, L. N. (2003). *Finding common ground in clinical practice and research: A process research review*. Paper presented at the Annual Meeting of the American Association for Marriage and Family Therapy, Long Beach, CA.

- Christensen, L. L., Russell, C. S., Miller, R. B., & Peterson, C. M. (1998). The process of change in couples therapy: A qualitative investigation. *Journal of Marital & Family Therapy*, 24(2), 177-188.
- Cook, W. L., & Kenny, D. A. (2005). The Actor-Partner Interdependence Model: A model of bidirectional effects in developmental studies. *International Journal of Behavioral Development*, 29(2), 101-109.
- 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), 551-572.
- Davenport, B. R., & Ratliff, D. (2001). Alliance ratings as part of trainee evaluations within family therapy training. *Contemporary Family Therapy: An International Journal*, 23(4), 441-454.
- Doerfler, L. A., Addis, M. E., & Moran, P. W. (2002). Evaluating mental health outcomes in an inpatient setting: Convergent and divergent validity of the OQ-45 and BASIS-32. *Journal of Behavioral Health Services & Research*, 29(4), 394-403.
- Doherty, W. J., Boss, P. G., LaRossa, R., Schumm, W. R., & Steinmetz, S. K. (1993). Family theories and methods: A contextual approach. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 3-30). New York: Plenum Press.
- Dykeman, C. (1995). An introduction to working alliance theory for professional counselors.
- Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling*, 8(3), 430-457.

- Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. *Psychological Methods, 12*(2), 121-138.
- Evon, D. M., & Burns, J. W. (2004). Process and outcome in cardiac rehabilitation: an examination of cross-lagged effects. *Journal Of Consulting And Clinical Psychology, 72*(4), 605-616.
- Flaskas, C. (2004). Thinking about the therapeutic relationship: Emerging themes in family therapy. *Australian and New Zealand Journal of Family Therapy, 25*(1), 13-20.
- Friedlander, M. L., Escudero, V., & Heatherington, L. (2006). *Therapeutic alliances in couple and family therapy: An empirically informed guide to practice* (1st ed.). Washington, DC: American Psychological Association.
- Friedlander, M. L., Escudero, V., Horvath, A. O., Heatherington, L., Cabero, A., & Martens, M. P. (2006). System for Observing Family Therapy Alliances: A tool for research and practice. *Journal of Counseling Psychology, 53*(2), 214-225.
- Fuertes, J. N., Mislowsky, A., Bennett, J., Paul, L., Gilbert, T. C., Fontan, G., et al. (2007). The physician-patient working alliance. *Patient Education and Counseling, 66*(1), 29-36.
- Garfield, R. (2004). The therapeutic alliance in couples therapy: Clinical considerations. *Family Process, 43*(4), 457-465.
- Glass, C. R., Arnkoff, D. B., & Shapiro, S. J. (2001). Expectations and preferences. *Psychotherapy: Theory, Research, Practice, Training, 38*(4), 455-461.
- Goldberg, M. (1974). The uses of dreams in conjoint marital therapy. *Journal of Sex & Marital Therapy, 1*(1), 75-81.
- Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research, 26*(3), 499-510.

- Greenson, R. R. (1965). The working alliance and the transference neurosis. *Psychoanalytic Quarterly*, 34(2), 155-179.
- Greenson, R. R., & Wexler, M. (1969). The non-transference relationship in the psychoanalytic situation. *International Journal of Psycho-Analysis*, 50(1), 27-39.
- Gurman, A. S. (2001). Brief therapy and family/couple therapy: An essential redundancy. *Clinical Psychology: Science and Practice*, 8(1), 51-65.
- Halverson, C. (2002). Cloud of constructs. In C. class (Ed.). Athens, GA.
- Heatherington, L., & Friedlander, M. L. (1990). Couple and Family Therapy Alliance Scales: Empirical considerations. *Journal of Marital & Family Therapy*, 16(3), 299-306.
- Heatherington, L., Friedlander, M. L., & Greenberg, L. (2005). Change process research in couple and family therapy: Methodological challenges and opportunities. *Journal of Family Psychology*, 19(1), 18-27.
- Holtzworth-Munroe, A., Jacobson, N. S., DeKlyen, M., & Whisman, M. A. (1989). Relationship between behavioral marital therapy outcome and process variables. *Journal of Consulting and Clinical Psychology*, 57(5), 658-662.
- Hopkins, M., & Ramsundar, N. (2006). Which factors predict case management services and how do these services relate to client outcomes? *Psychiatric Rehabilitation Journal*, 29(3), 219-222.
- Horvath, A. O. (2000). The therapeutic relationship: From transference to alliance. *Journal of Clinical Psychology*, 56(2), 163-173.
- Horvath, A. O. (2001). The alliance. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 365-372.

- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38(2), 139-149.
- Jacobson, N. S., & Christensen, A. (1996). *Acceptance and change in couple therapy: A therapist's guide to transforming relationships*. New York: WW Norton & Co.
- Johnson, L. N., & Ketrting, S. A. (2006). The therapy alliance: A moderator in therapy outcome for families dealing with child abuse and neglect. *Journal of Marital & Family Therapy*, 32(3), 345-354.
- Johnson, L. N., Ketrting, S. A., & Anderson, S. R. (under review). The Intersession Report: Providing session-by-session information on client progress to therapists and researchers. *Journal of Marital & Family Therapy*.
- Johnson, L. N., Ketrting, S. A., & Anderson, S. R. (under review ). Confirmatory factor analysis of the Family Therapy Alliance Scale: Measurement invariance across parents and adolescents. *Journal of Marital and Family Therapy*.
- 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), 257-269.
- Johnson, S. M. (1996). *The practice of emotionally focused marital therapy: creating connection*. Philadelphia: Brunner/Mazel.
- Johnson, S. M., & Greenberg, L. S. (1985). Differential effects of experiential and problem-solving interventions in resolving marital conflict. *Journal of Consulting and Clinical Psychology*, 53(2), 175-184.
- Johnson, S. M., & Talitman, E. (1997). Predictors of success in emotionally focused marital therapy. *Journal of Marital & Family Therapy*, 23(2), 135-152.

- Joyce, A. S., Ogrodniczuk, J. S., Piper, W. E., & McCallum, M. (2003). The alliance as mediator of expectancy effects in short-term individual therapy. *Journal of Consulting and Clinical Psychology, 71*, 672-679.
- Kenny, D. A. (1996). Models of non-independence in dyadic research. *Journal of Social & Personal Relationships, 13*(2), 279-294.
- Kenny, D. A., & Cook, W. L. (1999). Partner effects in relationship research: Conceptual issues, analytic difficulties, and illustrations. *Personal Relationships, 6*, 433-448.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York: Guilford Press.
- Knobloch-Fedders, L. M., Pinsof, W. M., & Mann, B. J. (2004). The formation of the therapeutic alliance in couple therapy. *Family Process, 43*(4), 425-442.
- Knobloch-Fedders, L. M., Pinsof, W. M., & Mann, B. J. (2007). Therapeutic alliance and treatment progress in couple psychotherapy. *Journal of Marital & Family Therapy, 33*(2), 245-257.
- Ladany, N., Ellis, M. V., & Friedlander, M. L. (1999). The supervisory working alliance, trainee self-efficacy, and satisfaction. *Journal of Counseling & Development, 77*(4), 447.
- Lambert, M. J. (1992). Psychotherapy outcome research: Implications for integrative and eclectic therapists. In J. C. Norcross & M. R. Goldfried (Eds.), *Handbook of psychotherapy integration* (pp. 94-129). New York: Basic Books.
- Lambert, M. J., Hansen, N. B., Umphress, V., Lunnen, K., Okiishi, J., Burlingame, G. M., et al. (1996). *Administration and scoring manual for the OQ-45.2 (outcome questionnaire)*. Stevenson, MD: American Professional Credentialing Services LLC.

- Lambert, M. J., Okiishi, J. C., Finch, A. E., & Johnson, L. D. (1998). Outcome assessment: From conceptualization to implementation. *Professional Psychology: Research and Practice*, 29(1), 63-70.
- Liddle, H. A. (2002). Multidimensional Family Therapy for adolescent cannabis users (Vol. 5). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Little, R. J., & Rubin, D. B. (1989). The analysis of social science data with missing values. *Sociological Methods and Research*, 18(2 & 3), 292-326.
- Mamodhoussen, S., Wright, J., Tremblay, N., & Poitras-Wright, H. (2005). Impact of marital and psychological distress on therapeutic alliance in couples undergoing couple therapy. *Journal of Marital & Family Therapy*, 31(2), 159-169.
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 68(3), 438-450.
- 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.
- Multon, K. D., Ellis-Kalton, C. A., Heppner, M. J., & Gysbers, N. C. (2003). The relationship between counselor verbal response modes and the working alliance in career counseling. *Career Development Quarterly*, 51(3), 259.
- Patalano, F. (1997). Developing the working alliance in marital therapy: A psychodynamic perspective. *Contemporary Family Therapy: An International Journal*, 19(4), 497-505.
- Pinsof, W. M. (1992). Toward a scientific paradigm for family psychology: The integrative process systems perspective. *Journal of Family Psychology*, 5(3), 432-447.



- 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. 173-195). New York, NY: John Wiley & Sons.
- Pinsof, W. M., & Catherall, D. R. (1986). The integrative psychotherapy alliance: Family, couple and individual therapy scales. *Journal of Marital & Family Therapy*, 12(2), 137-151.
- Quinn, W. H., Dotson, D., & Jordan, K. (1997). Dimensions of therapeutic alliance and their associations with outcome in family therapy. *Psychotherapy Research*, 7(4), 429-438.
- Rait, D. S. (1995). The therapeutic alliance in couples and family therapy: Theory in practice. *In Session: Psychotherapy in Practice*, 1(1), 59-72.
- Rait, D. S. (2000). The therapeutic alliance in couples and family therapy. *Journal of Clinical Psychology*, 56(2), 211-224.
- Raytek, H. S., McCrady, B. S., Epstein, E. E., & Hirshch, L. S. (1999). Therapeutic alliance and the retention of couples in conjoint alcoholism treatment. *Addictive Behaviors*, 24(3), 317-330.
- Rogers, C. R. (1951). *Client-centered therapy; its current practice, implications, and theory*. Oxford, England: Houghton Mifflin.
- Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21(2), 95-103.
- Rutan, J. S., & Smith, J. W. (1985). Building therapeutic relationships with couples. *Psychotherapy: Theory, Research, Practice, Training*, 22(2), 194-200.
- Safran, J. D., & Muran, J. C. (1996). The resolution of ruptures in the therapeutic alliance. *Journal of Consulting and Clinical Psychology*, 64(3), 447-458.

- Safran, J. D., & Muran, J. C. (2006). Has the concept of the therapeutic alliance outlived Its usefulness? *Psychotherapy: Theory, Research, Practice, Training*, 43(3), 286-291.
- Schlosser, L. Z., & Gelso, C. J. (2005). The Advisory Working Alliance Inventory--Advisor Version: Scale development and validation. *Journal of Counseling Psychology*, 52(4), 650-654.
- Sexton, H. C., Hembre, K., & Kvarme, G. (1996). The interaction of the alliance and therapy microprocess: A sequential analysis. *Journal of Consulting and Clinical Psychology*, 64(3), 471-480.
- Shadish, W. R., & Baldwin, S. A. (2003). Meta-analysis of MFT interventions. *Journal of Marital & Family Therapy*, 29(4), 547-570.
- Shapiro, E. R., Shapiro, R. L., Zinner, J., & Berkowitz, D. A. (1977). The borderline ego and the working alliance: Indications for family and individual treatment in adolescence. *International Journal of Psycho-Analysis*, 58(1), 77-87.
- Sheu, H.-B., & Sedlacek, W. E. (2004). An exploratory study of help-seeking attitudes and coping strategies among college students by race and gender. *Measurement & Evaluation in Counseling & Development*, 37(3), 130-143.
- Shirk, S. R., & Karver, M. (2003). Prediction of treatment outcome from relationship variables in child and adolescent therapy: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 71(3), 452-464.
- Snyder, D. K., Castellani, A. M., & Whisman, M. A. (2006). Current status and future directions in couple therapy. *Annual Review of Psychology*, 57, 317-344.
- Solomon, M. A. (1977). The staging of family treatment: An approach to developing the therapeutic alliance. *Journal of Marital & Family Therapy*, 3(2), 59-66.

- Sprenkle, D. H., & Blow, A. J. (2004). Common factors and our sacred models. *Journal of Marital & Family Therapy*, 30(2), 113-129.
- Sterba, R. (1934). The fate of the ego in analytic therapy. *International Journal of Psycho-Analysis*, 15, 117-126.
- Symonds, D., & Horvath, A. O. (2004). Optimizing the alliance in couple therapy. *Family Process*, 43(4), 443-455.
- Thomas, M. L. (2006). The contributing factors of change in a therapeutic process. *Contemporary Family Therapy: An International Journal*, 28(2), 201-210.
- Thomas, S. E. G., Werner-Wilson, R. J., & Murphy, M. J. (2005). Influence of therapist and client behaviors on therapy alliance. *Contemporary Family Therapy: An International Journal*, 27(1), 19-35.
- Umphress, V. J., Lambert, M. J., Smart, D. W., Barlow, S. H., & Clouse, G. (1997). Concurrent and construct validity of the outcome questionnaire. *Journal of Psychoeducational Assessment*, 15(1), 40-55.
- Vermeersch, D. A., Lambert, M. J., & Burlingame, G. M. (2000). Outcome questionnaire: Item sensitivity to change. *Journal of Personality Assessment*, 74(2), 242-261.
- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Wells, M. G., Burlingame, G. M., Lambert, M. J., Hoag, M. J., & Hope, C. A. (1996). Conceptualization and measurement of patient change during psychotherapy: Development of the outcome questionnaire and youth outcome questionnaire. *Psychotherapy*, 33(2), 275-283.

- Wintersteen, M. B., Mensinger, J. L., & Diamond, G. S. (2005). Do gender and racial differences between patient and therapist affect therapeutic alliance and treatment retention in adolescents? *Professional Psychology: Research and Practice*, 36(4), 400-408.
- Zetzel, E. R. (1956). Current concepts of transference. *International Journal of Psycho-Analysis*, 37, 369-375.

## Appendix A: Instruments

### Revised Dyadic Adjustment Scale

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

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

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

	Every Day	Almost Every Day	Occasionally	Rarely	Never
11. Do you and your mate engage in outside interests together?	_____	_____	_____	_____	_____

## Demographics and Family Information

Please provide the following personal information. If a question does not apply to you write NA for Not Applicable. All information is confidential.

1. Your age: \_\_\_\_\_ 2. Your Sex: \_\_\_\_\_
3. Your current relationship/marital status is:
 

A. Single/Never Married	B. Married	C. Divorced	D. Separated
E. Widowed	F. Significant Other— Heterosexual	G. Significant Other— Homosexual	H. Significant Other— Bisexual
4. If you are married or living together, how long have you been with your current partner? \_\_\_\_\_.
5. If you have children, please provide the following information. Use the back of this page if more space is needed.
 

<u>Child</u>	<u>Sex</u>	<u>Age</u>	<u>Race</u>	<u>Name</u>	<u>Stepchild, adopted, biological</u>	<u>Who does this child live with?</u>
1 <sup>st</sup>	M F	_____	_____	_____	_____	You Other parent/ guardian On their own
2 <sup>nd</sup>	M F	_____	_____	_____	_____	You Other parent/ guardian On their own
3 <sup>rd</sup>	M F	_____	_____	_____	_____	You Other parent/ guardian On their own
6. What is your racial/ethnic group? \_\_\_\_\_ (Please Specify)
7. What is your current occupation? \_\_\_\_\_ (Please Specify)
8. What is the highest level of education you attained?
 

A. Grade School	B. Junior High School	C. GED
D. High School	E. Vocational/Technical School	F. Associate Degree/2 years
G. Bachelor degree	H. Master's degree	I. Other _____(Specify)
9. Your yearly income is: (Please indicate your combined income with your partner)
 

A. Under \$5,000	B. \$5,000 to \$10,000	C. \$10,001 to \$15,000
D. \$15,001 to \$20,000	E. \$20,001 to \$25,000	F. \$25,001 to \$30,000
G. \$30,001 to \$35,000	H. \$35,001 to \$40,000	I. Over \$40,001
10. What is your current religious/spiritual preference? \_\_\_\_\_
11. Do you have current or previous experiences with counseling or therapy? YES NO
12. List any current physical health problems \_\_\_\_\_
13. List any medication you are currently taking \_\_\_\_\_

14. Please answer questions for the **family in which you now live** and the **family in which you grew up**.

<u>In your family were/are there problems with</u>	<u>In the family in which</u> <u>you now live</u>		<u>In the family in which</u> <u>you grew up</u>	
A. Alcohol, drug substance, or prescription abuse	YES	NO	YES	NO
B. Physical abuse or violence	YES	NO	YES	NO
C. Sexual abuse	YES	NO	YES	NO
D. Emotional abuse	YES	NO	YES	NO
E. Mental illness	YES	NO	YES	NO
F. Trouble with the law	YES	NO	YES	NO
G. Religious/spiritual practice	YES	NO	YES	NO
H. Suicide/attempted suicide	YES	NO	YES	NO

15. How much did someone else pressure you to come for therapy?

Not at all pressured	A little pressured	Somewhat pressured	Quite pressured	Very pressured
1	2	3	4	5

16. Starting with the most important, please list the problems that brought you to therapy?

- A. \_\_\_\_\_ B. \_\_\_\_\_  
C. \_\_\_\_\_ D. \_\_\_\_\_

17. Do you consider the problems that brought you to therapy to be the responsibility of:

- A. Yourself B. Your spouse/partner C. One of your children  
D. You & your spouse/partner E. The whole family

18. Who referred you to the MFT clinic?

- A. Friend B. Spouse/partner  
C. Teacher D. Minister/Clergy person  
E. Physician F. Former or current client  
G. Advertising (specify) \_\_\_\_\_ H. Self referral  
I. Other \_\_\_\_\_

### Couple Therapy Alliance Scale

Instructions: The following statements refer to your feelings and thoughts about your therapist and your therapy right NOW.

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

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

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



conducted.

24. The therapist is not helping me.	7	6	5	4	3	2	1
25. The therapist is in agreement with the goals that my partner and I have for ourselves as a couple in this therapy.	7	6	5	4	3	2	1
26. The therapist does not care about my partner as a person.	7	6	5	4	3	2	1
27. My partner and I are in agreement with each other about the goals of this therapy.	7	6	5	4	3	2	1
28. My partner and I are not in agreement about the things that each of us needs to do in this therapy.	7	6	5	4	3	2	1
29. The therapist has the skills and ability to help me.	7	6	5	4	3	2	1
30. The therapist is not helping my partner.	7	6	5	4	3	2	1
31. My partner is satisfied with the therapy.	7	6	5	4	3	2	1
32. I do not care about the therapist as a person.	7	6	5	4	3	2	1
33. The therapist has the skills and ability to help my partner.	7	6	5	4	3	2	1
34. My partner and I are not pleased with the things that each of us does in this therapy.	7	6	5	4	3	2	1
35. My partner and I trust each other in this therapy.	7	6	5	4	3	2	1
36. My partner and I distrust the therapist.	7	6	5	4	3	2	1
37. The therapist cares about the relationship between my partner and myself.	7	6	5	4	3	2	1
38. The therapist does not understand my partner.	7	6	5	4	3	2	1
39. My partner and I care about each other in this therapy.	7	6	5	4	3	2	1
40. The therapist does not appreciate how important my relationship between my partner and myself is to me.	7	6	5	4	3	2	1

## Intersession Report

Name: \_\_\_\_\_ Today's Date: \_\_\_\_\_ Session Time: \_\_\_\_\_

Please circle the number that best represents your experiences.

**1) I feel nervous, anxious, or unsettled.**

Almost never

1                      2                      3                      Half the time                      4                      5                      6                      Almost all the time  
7

**2) I feel hopeless, depressed, or down.**

Almost never

1                      2                      3                      Half the time                      4                      5                      6                      Almost all the time  
7

**3) I would rate my ability to function at work, school, or home:**

Very poor                      Similar to others                      Excellent  
1                      2                      3                      4                      5                      6                      7

**4) Satisfaction with my personal relationships has been:**

Very poor                      About average                      Excellent  
1                      2                      3                      4                      5                      6                      7

**5) I rate the positive sentiment, support, and collaboration in my life as:**

Very poor                      Similar to others                      Excellent  
1                      2                      3                      4                      5                      6                      7

**6) I would rate progress toward therapy goals as:**

Very poor                      Moderate                      Excellent  
1                      2                      3                      4                      5                      6                      7

**7) I rate the defensiveness, blaming, and negativity in my life as:**

Very low                      Similar to others                      Very high  
1                      2                      3                      4                      5                      6                      7

**8) The likelihood of my problems being resolved is:**

Very low                      Not sure                      Very high  
1                      2                      3                      4                      5                      6                      7

**Your responses to the next two questions will be removed prior to your therapist seeing this form:**

**9) My relationship with the therapist is:**

Very poor                      Moderate                      Excellent  
1                      2                      3                      4                      5                      6                      7

**Answer Question 10 only if you are attending therapy with someone else:**

**10) I rate the relationship we as a couple or my whole family has with the therapist as:**

Very poor                      Moderate                      Excellent  
1                      2                      3                      4                      5                      6                      7

# Outcome Questionnaire (OQ®-45.2)

Instructions: Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under the category which best describes your current situation. For this questionnaire, work is defined as employment, school, housework, volunteer work, and so forth. Please do not make any marks in the shaded areas.

Name: \_\_\_\_\_ Age: \_\_\_\_\_ yrs.

Sex  
ID# \_\_\_\_\_ M ☐ F ☐

Session # \_\_\_\_\_ Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

	Never	Rarely	Sometimes	Frequently	Almost Always	SD	IR	SR
						DO NOT MARK BELOW		
1. I get along well with others.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0		<input type="checkbox"/>	
2. I tire quickly.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
3. I feel no interest in things.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
4. I feel stressed at work/school.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
5. I blame myself for things.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
6. I feel irritated.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
7. I feel unhappy in my marriage/significant relationship.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
8. I have thoughts of ending my life.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
9. I feel weak.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
10. I feel fearful.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
11. After heavy drinking, I need a drink the next morning to get going. (If you do not drink, mark "never")	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
12. I find my work/school satisfying.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0			<input type="checkbox"/>
13. I am a happy person.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>		
14. I work/study too much.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
15. I feel worthless.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
16. I am concerned about family troubles.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
17. I have an unfulfilling sex life.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
18. I feel lonely.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
19. I have frequent arguments.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
20. I feel loved and wanted.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0		<input type="checkbox"/>	
21. I enjoy my spare time.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0			<input type="checkbox"/>
22. I have difficulty concentrating.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
23. I feel hopeless about the future.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
24. I like myself.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>		
25. Disturbing thoughts come into my mind that I cannot get rid of.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
26. I feel annoyed by people who criticize my drinking (or drug use). (If not applicable, mark "never")	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
27. I have an upset stomach.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
28. I am not working/studying as well as I used to.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
29. My heart pounds too much.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
30. I have trouble getting along with friends and close acquaintances.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4		<input type="checkbox"/>	
31. I am satisfied with my life.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>		
32. I have trouble at work/school because of drinking or drug use. (If not applicable, mark "never")	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
33. I feel that something bad is going to happen.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
34. I have sore muscles.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
35. I feel afraid of open spaces, of driving, or being on buses, subways, and so forth.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
36. I feel nervous.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
37. I feel my love relationships are full and complete.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0		<input type="checkbox"/>	
38. I feel that I am not doing well at work/school.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4			<input type="checkbox"/>
39. I have too many disagreements at work/school.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
40. I feel something is wrong with my mind.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
41. I have trouble falling asleep or staying asleep.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
42. I feel blue.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
43. I am satisfied with my relationships with others.	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0		<input type="checkbox"/>	
44. I feel angry enough at work/school to do something I might regret.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		
45. I have headaches.	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>		

Developed by Michael J. Lambert, Ph.D. and Gary M. Burlingame, Ph.D.  
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For More Information Contact:

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TOLL-FREE: 1-888-MH SCORE, (1-888-647-2673)  
FAX/VOICE: 1-973-366-8665

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Total=

## Appendix B: IRB Approval Letters



AUBURN  
UNIVERSITY

Office of Human Subjects Research  
307 Sanford Hall  
Auburn University, AL 36849

Telephone: 334-844-5966  
Fax: 334-844-4391  
hsubject@auburn.edu

June 15, 2007

MEMORANDUM TO: Shayne Anderson  
Human Development and Family Studies

PROTOCOL TITLE: "Understanding the Alliance in Couples Therapy"

IRB FILE NO.: 07-128 EX 0705

APPROVAL DATE: May 31, 2007

EXPIRATION DATE: May 30, 2008

The referenced protocol was approved "Exempt" from further review under 45 CFR 46.101 (b)(4) by IRB procedure on May 31, 2007. Final revisions were received on June 13, 2007. You should retain this letter in your files, along with a copy of the revised protocol and other pertinent information concerning your study. If you should anticipate a change in any of the procedures authorized in this protocol, you must request and receive IRB approval prior to implementation of any revision. Please reference the above IRB file number in any correspondence regarding this project.

If you will be unable to file a Final Report on your project before May 30, 2008, you must submit a request for an extension of approval to the IRB no later than May 16, 2008. If your IRB authorization expires and/or you have not received written notice that a request for an extension has been approved prior to May 30, 2008, you must suspend the project immediately and contact the Office of Human Subjects Research for assistance.

A Final Report will be required to close your IRB project file.

If you have any questions concerning this Board action, please contact the Office of Human Subjects Research at 844-5966.

Sincerely,

Nikki L. Johnson, JD, MBA, Director  
Office of Human Subjects Research  
Research Compliance Auburn University

Enclosure

cc: Dr. Leanne Lamke  
Dr. Scott Ketrang



Office of The Vice President for Research  
DHHS Assurance ID No. : FWA00003901

## Appendix B: IRB Approval Letters

Institutional Review Board  
Human Subjects Office  
612 Boyd GSRC  
Athens, Georgia 30602-7411  
(706) 542-3199  
Fax: (706) 542-3360  
www.ovpr.uga.edu/hso

### APPROVAL FORM

Date Proposal Received: 2007-05-17

Project Number: 2007-10765-0

Name	Title	Dept/Phone	Address	Email
Mr. Shayne Anderson	PI	CHFD - McPhaul Family Therapy Clinic 123 Dawson Hall +1010 706-425-3209		shayne@uga.edu
Dr. Lee Johnson	CO	Child & Family Development 123 Dawson Hall +1010 706-542-4821		ljohnson@fcs.uga.edu

Title of Study: Therapeutic Alliance in Couple Therapy

45 CFR 46 Category: Expedite 5

Parameters:

Waiver of Signed Consent 46.117 (c)(2): Dataset analysis only.

Change(s) Required for Approval:

None;

Approved : 2007-06-15    Begin date : 2007-06-15    Expiration date : 2008-06-14

NOTE: Any research conducted before the approval date or after the end data collection date shown above is not covered by IRB approval, and cannot be retroactively approved.

Number Assigned by Sponsored Programs:

Funding Agency:

Form 310 Provided: No

Your human subjects study has been approved.

Please be aware that it is your responsibility to inform the IRB:

- ... of any adverse events or unanticipated risks to the subjects or others within 24 to 72 hours;
- ... of any significant changes or additions to your study and obtain approval of them before they are put into effect;
- ... that you need to extend the approval period beyond the expiration date shown above;
- ... that you have completed your data collection as approved, within the approval period shown above, so that your file may be closed.

For additional information regarding your responsibilities as an investigator refer to the IRB Guidelines.

Use the attached Researcher Request Form for requesting renewals, changes, or closures.

Keep this original approval form for your records.

Chairperson or Designee,  
Institutional Review Board