# TAILORING COUPLE THERAPY TECHNIQUES TO CLIENT NEEDS

A Thesis

by

ANNIE C. HSUEH

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

December 2008

Major Subject: Psychology

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# Approved by:

Chair of Committee, Brian D. Doss
Committee Members, Daniel F. Brossart
Douglas K. Snyder
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### ABSTRACT

Tailoring Couple Therapy Techniques to Client Needs. (December 2008)

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Chair of Advisory Committee: Dr. Brian D. Doss

Research illuminating which therapist techniques are used in care-as-usual couple therapy, and under what circumstances, can contribute to a fuller understanding of how therapy works. The overall goal of the present study was to better understand care-as-usual couple therapy by investigating session-by-session techniques and session content to determine how therapists modify them based on the timing of the session and couples' pre-treatment characteristics. A total of 123 heterosexual couples were examined.

Therapists frequently used acceptance techniques and discussion of recent or ongoing conflict or problem. Therapists typically used the same levels of techniques and session contents over a course of therapy. In addition, there were relatively few predictors of change in therapy techniques and session content.

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#### INTRODUCTION

*Importance of Alleviating Couple Distress* 

The negative effects of relationship distress have been well-documented. Poor marital functioning has a direct negative influence on cardiovascular, endocrine, immune, neurosensory and other physiological mechanisms (Kiecolt-Glaser & Newton, 2001; Robles & Kiecolt-Glaser, 2003). Furthermore, poor marital functioning negatively impacts health outcomes indirectly through depression and risky health habits such as poor eating habits and substance abuse (Kiecolt-Glaser & Newton). Additionally, marital dissatisfaction is strongly associated with both depressive symptoms and diagnostic depression (Whisman, 2001) and with other psychological disorders such as anxiety disorders (McLeod, 1994) and alcohol abuse (Halford & Osgarby, 1993). Furthermore, couples' distress can lead to an increase in risk for behavioral, emotional, social, and academic problems in their children (Cherlin et al., 1991; Erel &Burman, 1995; Grych & Fincham, 1990; Laumakis, Margolin & John, 1998). Given the negative outcomes associated with couple distress, the alleviation of couple distress is an important scientific and societal goal.

Effectiveness of Couple Therapy

Fortunately, research has demonstrated the effectiveness of couple therapy for improving relationship satisfaction in the average couple. Meta-analyses suggested that, as a whole,

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couple therapy is more effective than no treatment at post-treatment (d = .79) and at follow-up (d = .52) in fostering changes in couple relationships (for a review, see Sexton, Alexander & Mease, 2004). In particular, behavioral couple therapy, (BCT; also known as behavioral marital therapy) an intervention based on the social learning theory of human behavior, has been researched extensively. Its efficacy has been demonstrated in over 20 randomized clinical trials (A. Christensen & Heavey, 1999; Jacobson & Addis, 1993). A number of meta-analytic studies have found that those who receive BCT report less marital distress than those who receive no treatment, with effect sizes ranging from d = .59 to d = .95. (Dunn & Schwebel, 1995; Hahlweg & Markman, 1988; Shadish & Baldwin, 2005; Shadish et al., 1993). While BCT has garnered the most empirical support among couple treatments, other forms of therapy such as cognitive-behavioral couples therapy (CBCT; Baucom & Epstein, 1990, Epstein & Baucom, 2002), integrative behavioral couple therapy (IBCT; A. Christensen et al., 2004), insightoriented couple therapy (Snyder & Wills, 1989; also known as insight-oriented marital therapy), and emotion focused couple therapy (EFT; Greenberg & Johnson, 1988), have shown promise. Indeed, one study suggested that EFT is more effective than components of BCT in treating moderate, but not mild, distress (Wood, Crane, Schaalje, & Law, 2005).

### Predictors of Outcome Studies

Although couple therapy has been shown to be effective in producing changes in relationship satisfaction, about 29% to 50% of couples are not responsive to treatment (A. Christensen et al., 2004; A. Christensen & Heavey, 1999; Jacobson & Addis, 1993).

Of the couples who made initial gains, a sizable percentage relapsed within two years (Jacobson & Addis, 1993). A number of studies examining predictors of outcomes for couple therapy to illuminate which couples do not respond well to therapy have yielded inconsistent results (For a review, see Snyder, Castellani, & Whisman, 2006).

In the largest and most methodologically sophisticated study to date on this topic, Atkins et al., (2005) examined demographic variables (e.g., age and years married), interpersonal variables (e.g., communication, closeness, and commitment), and intrapersonal variables (e.g., personality and psychopathology) as predictors of outcome. Interpersonal variables explained a small to medium amount of variance for change in therapy when the variables are considered together, but each interpersonal variable had no significant effect when considered alone. Demographic variables also explained some of the variability in change components. Men improved more rapidly in therapy, but this change decelerated over time. Couples who had been married longer improved at a relatively greater rate than those who have been married shorter periods of time. Furthermore, couples with greater closeness initially improved in therapy and then decelerated in their change over time. Overall, the study concluded that there were a lack of strong predictors of change in therapy and little predicts therapy outcome.

Moving Toward a Greater Understanding of Couple Therapy

Given the negative effects associated with relationship distress, lack of improvement for some couples that underwent therapy, and inconsistent findings on predictors of therapy outcome, it is important to study in more detail what happens in couple therapy. A qualitative study examining change in couple therapy found that

affect, communication, and cognition all played a role in the change process, and the change process was gradual and without demarcation (L. L. Christensen, Russell, Miller, & Peterson, 1998). However, this study was retrospective in nature, which may have limited the accuracy of client reports on therapy. More research on therapeutic change processes in couple therapy is needed (Heatherington, Friedlander, & Greenberg, 2005) to better understand what therapy *is* rather than just what it *does* (Orlinsky, Grawe, & Parks, 1994). In psychotherapy literature, there has been a longstanding debate centered on two components of therapy (Goldfried & Davila, 2005). One perspective focuses on "common" or, "nonspecific" factors such as therapeutic relationship and therapist qualities. Often pitted against this perspective is the "specific" factor perspective that examines factors such as therapist techniques.

# Common Factor Perspective

In his taxonomy of factors in successful individual therapy, Lambert (1992) suggested that 40% of variance in change could be attributed to client/extra-therapeutic factors, 30% to common, or relationship factors, and 15% to placebo, hope, and expectancy factors. By contrast, his taxonomy suggested that only 15% of variance in change could be attributed to model/technique factors. Within the therapeutic relationship, therapeutic alliance has been repeatedly demonstrated to improve psychotherapy outcomes, especially in the individual psychotherapy literature (e.g., Castonguay & Beutler, 2006; Horvath & Symonds, 1991; Wampold, 2001). To highlight the fact that data existed for the importance of the therapeutic relationship, the Division of Psychotherapy, Division 29, of the American Psychological Association (APA),

aggregated and disseminated information on empirically supported therapy relationships (Norcross, 2002, 2004). Another common factor, client involvement in therapy, has also been shown to relate positively to outcome (e.g., Gomes-Schwartz, 1978; Kolb, Beutler, Davis, Crago, & Shanfield, 1985; O'Malley, Suh, & Strupp, 1983). In addition to its relation with outcome, therapeutic alliance has also been shown to be a predictor of client dropout in individual therapy (e.g., Piper et al., 1999). However, despite research showing a relation between alliance and outcome, it is not yet clear that a strong therapeutic alliance is a causal factor in therapeutic change (DeRubeis, Brotman, & Gibbons, 2005). In fact, evidence in cognitive-behavioral therapy for depression suggested that positive therapeutic alliance followed improvements rather than preceded them (Tang & DeRubeis, 1999).

The importance of common factors has also been documented in the couple therapy literature. Similar to the finding in individual literature, client involvement in couple therapy has also been shown to relate positively to outcome (Holtzworth-Munroe, Jacobson, DeKlyen, & Whisman, 1989). In an EFT study, the quality of alliance between the couple and the therapist accounted for 22% of variance in post-treatment relationship satisfaction (Johnson & Talitman, 1997). Furthermore, an investigation of the role of therapeutic alliance in group couple therapy found that the quality of therapeutic alliance explained a modest proportion of outcome (3%-10%). Initial levels of relationship distress neither impaired nor facilitated alliance formation. Interestingly, the strength of the alliance was a more powerful predictor of therapeutic success among men than among women (Bourgeois, Sabourin, & Wright, 1990). In couple therapy, the

correlation between alliance and outcome was significantly stronger when the partners agreed about the strength of the alliance, when the strengths of both partner's alliance increased as therapy progressed, and when the male partner's alliance was stronger than the female partner's alliance (Symonds & Horvath, 2004). From the clients' perspective, therapist warmth, non-judgmental stance, empathy, along with a sense of safety, fairness, and hope all contributed to successful couple therapy (L. L. Christensen et al., 1998; Sells, Smith, & Moon, 1996). However, it has also been shown that therapeutic alliance does not correlate significantly with clients' perceptions of the smoothness of therapy sessions (Heatherington & Friedlander, 1990). Sprenkle and Blow (2004) described three factors that they believed to be unique common factors for couple and family therapy: (1) relational conceptualization, or the translation of human difficulties into relational terms, (2) expanded direct treatment system, or the involvement of more people than the identified or willing client directly in treatment, and (3) expanded therapeutic alliance, or the alliance therapist forms not just with an individual, but also with certain subsystems, or with the family as a whole. These studies combined, point to the importance of the therapeutic relationship in both individual and couple therapy. Specific Factor Perspective

Rather than examining how the relationship between therapist and client leads to change, the specific factor perspective focused on how therapeutic techniques lead to change. In the family therapy literature, it has been shown through single-subject ABAB reversal designs that therapist efforts to "teach" and "confront" produce significant increases in the likelihood that the clients have a noncompliant reaction (Patterson &

Forgatch, 1985). To date, no studies to our knowledge have directly manipulated therapist interventions within the course of ongoing couple therapy. Within the couple therapy field, the primary experimental evidence of the importance of therapeutic technique comes from dismantling or add-on studies. A study investigating whether the effectiveness of BCT would be increased by adding a cognitive restructuring and/or an emotional expressiveness training component found the treatments equally effective in increasing marital adjustment; the addition of the cognitive and/or emotional component did not appear to increase effectiveness (Baucom, Sayers, & Sher, 1990). Another study comparing BCT with its enhanced version, which added cognitive restructuring, affect exploration, and generalization training to BCT, found that both conditions resulted in impressive generalization across settings for the behavioral, cognitive, and affective domains (Halford, Sanders, & Behrens, 1993). These findings were consistent with previous findings that found no significant difference among various treatment conditions (e.g., Baucom, 1982; Baucom & Lester, 1986; Emmelkamp et al, 1988). A recent review of treatment outcome studies on BCT and EFT concluded that BCT probably does not lead to better outcomes than its components—behavioral exchange training and communication and problem-solving skills (Byrne, Carr, & Clark, 2004). Similar to the findings with BCT, adding a cognitive component to EFT did not enhance its efficacy (Byrne et al.). One notable exception is a study comparing a full BCT package with two of its components, behavior exchange and communication/problemsolving training (Jacobson, Schmaling, Holtzworth-Munroe, 1987). At the two-year follow-up, although no statistically significant difference was found among the three

treatments using measures of global martial satisfaction and a checklist of presenting problems, couples in the full treatment condition were most likely to be happily married and least likely to be separated or divorced. There has been another finding contrary to the general finding that components are usually as effective as the whole treatment. Specifically, a study by Jacobson (1978) compared two behavioral treatments for couple discord with a non-specific and a waitlist control. The non-specific intervention was devoid of specific instructions in communication skills, problem solving, and without contingency contracting procedure. Couples who received specific behavioral interventions improved significantly more than the couples who received nonspecific interventions on three of the four measures of relationship functioning (Jacobson). However, these results need to be interpreted with caution due to the limited number of studies in this area.

Despite the general finding that components are usually as effective as the whole treatment, it is premature to conclude that all approaches to couple therapy are equally effective. In fact, a met-analysis by (Shadish et al., 1993) revealed that humanistic couple therapy was significantly less effective than other approaches. Furthermore, findings of equal effectiveness from dismantling or add-on studies may be due to couples being randomly assigned to different treatment conditions (Baucom et al., 1990). Treatment effectiveness might increase when treatment is matched to couples based on their needs (Baucom et al.). It has also been hypothesized that some clients require multiple techniques whereas others may only need one technique to improve in therapy (Cameron, 1987). Previous finding suggested that couples are more likely to maintain

treatment gains after treatment when they are provided with individually tailored, flexible treatment plans rather than a more structured format (Jacobson et al., 1989). Additionally, experimental designs may fail to capture the typically responsive nature of couple therapists, artificially limiting the impact of therapist technique use.

Observational data in family therapy has shown that therapist behaviors "teach" and "confront" were associated with significant increases in the likelihood of client noncompliance, whereas therapist behaviors "facilitate" and "support" were followed by decreases of client noncompliance" (Patterson & Forgatch, 1985). Unfortunately, very few studies in the couple therapy literature have used naturalistic designs to examine how specific factors play a role in therapy. One study examined the difference between reflection (reality confirmation) and reframing (reality creation), two common couple therapy intervention strategies (Brown-Standridge & Piercy, 1988). Using coded videotaped therapy sessions, therapist choice of intervention was examined based on preceding client interaction patterns. Results suggested that reflection was implemented more often following defensive couple behaviors, while reframing happened more when couples appeared open-minded. There was a significant difference for male therapists in response to husband's attentive or non-attentive behavior; male therapists were more likely to use reflection following non-attentive behavior from husbands and reframing after attentive behaviors. Both male and female therapists tended to risk more reframes with attentive wives than with attentive husbands. Male therapists particularly appeared to use more deference when picking up non-attentive cues from both spouses in that they typically answered them with reflection. After videotapes were secured for the study,

therapists also completed a brief questionnaire about their thoughts and implicit decision rules when employing reflection and reframing. Reframing was the therapists' intervention of choice for "changing behavior"; therapists looked for openness and affirmation before switching from reflections to reframes (Brown-Standridge & Piercy). Research has also suggested "active and assertive therapists who are able to keep couple clients from over-participating may be received best by couples in the first session" (Odell & Quinn, 1998, p. 382).

Additionally, more research is needed on how client's pre-treatment characteristics and therapist characteristics relate to therapist techniques in therapy. Previous research showed that therapist directiveness was negatively associated with positive behaviors (acceptance, agreement, acknowledgement, approval, accepting responsibility) and therapy outcome for couples in the middle socioeconomic status (SES) group, particularly for husbands. Couples in the middle SES group tended to increase expressions of personal feelings when therapists used less directive approaches. On the other hand, for couples in the low SES group, therapist directiveness was predictive of positive behaviors in these couples and predictive of successful outcomes from the wives' perspective (Cline, Mejia, Coles, Klein, & Cline, 1984; see also Friedlander, Wildman, Heatherington, & Skowron, 1994). However, this finding needs to be interpreted with caution due to the data's correlational nature. Furthermore, although no studies have been conducted in the couple therapy literature, a study of family therapy showed that male and female therapists responded to behaviors from family members in different ways. Specifically, "female therapists were significantly

more likely to respond with structuring to supportiveness than were male therapists" (Newberry, Alexander, & Turner, 1991, p.168).

Toward a More Thorough Understanding of Specific Factors

Research illuminating what types of techniques are used in care-as-usual couple therapy, and under what circumstances, would contribute to a fuller understanding of how therapy works. Although "common" factors have an effect on therapy, they cannot explain the complexity of therapy change (Sexton, Ridley, & Kleiner, 2004). While previous studies have repeatedly documented the importance and positive contribution of a strong therapeutic relationship, there is a lack of research on specific factors that contribute to outcome in couple therapy. The present study has two key characteristics that further our current understanding of the role of therapist techniques in couple therapy.

Use of Care-as-Usual Therapy. Given the dearth of research on care-as-usual couple therapy and the ultimate interest in generalizing research results to these populations, examining care-as-usual couple therapy has additional advantages over studying couple therapy in a university-based research study. In the present study, care-as-usual couple therapy typically administered in a Veterans Administration Hospital setting was examined. In addition, therapists in the present study were free to deliver interventions in flexible, non-rigid ways, which was critical in forming an understanding of the role of technique use in couple therapy.

Use of Session-by-Session Measures of Technique and Session Content. A closer look at couple therapy process would involve measuring session-by-session information

on therapy contents and therapist techniques. Having session-by-session measures allowed for more accurate measure of therapy process as therapy progresses, eliminating retrospective bias. Qualitative evidence suggesting that couple therapy change process may be gradual and without demarcation (L. L. Christensen et al., 1998) also points to the importance of using session-by-session measures in therapy. The present study used therapists' reports of therapeutic interventions and session content completed following each session.

### *The Present Study*

The present study looked at care-as-usual treatment in real clinic settings in which therapists are not constrained by manuals. In such settings, therapists were free to individualize treatments to each couple and vary the length of the treatment. The overall goal of the present study was to better understand care-as-usual couple therapy by investigating session-by-session techniques and session content to determine how therapists modify them based on the timing of the session within the larger course of treatment and couples' pre-treatment characteristics.

Aims

Aim 1. The present study looked at changes in therapist techniques and session content over the course of therapy. These analyses provided the first evidence of whether couple therapists tend to increases or decrease their use of certain techniques over time or whether the same techniques are consistently applied to a different weekly topic introduced by the couple.

Aim 2. The present study also investigated how clients' pre-treatment characteristics (e.g., demographics, relationship satisfaction, and individual functioning) as well as therapist characteristics (e.g., level of experience and gender) related to therapist techniques and session content.

#### **METHOD**

### **Participants**

Couples. The present study was conducted as part of a larger ongoing project exploring the effectiveness of care-as-usual couple therapy in the VA healthcare system. Specifically, couples seeking therapy in the VA centers in Charleston, SC and San Diego, CA were examined. A total of 123 heterosexual couples that sought couple therapy across these two sites participated in this study. Preliminary finding (Doss, Rahbar, Libet, & Rait, 2006) showed that both men and women had significant linear change over time. After three to four months of treatment, there was a significant slowing of treatment gains, especially for women. In addition, couples who were more distressed before treatment had larger gains from therapy than couples who were less distressed before treatment.

Participant's mean age was 47.7 (SD = 12.8). Their mean number of years of education was 14.10 (SD = 2.46), and their mean monthly income was \$2474.71 (SD = 1164.62). Most of the participants were Caucasian (67.3%). Other ethnicities included African American (22.2%), Latino or Latina (6.45%), and Asian or Pacific Islander (2.8%), American/ Alaskan Indian (2.8%) and Other (2.8%). The mean length of relationship for these couples was 13.62 years (2.8%), and the mean number of children with the current partner was 2.92 (2.9%). As part of the larger ongoing project, participants completed the Dyadic Adjustment Scale (DAS; Spanier, 2.9%) on which scores below 2.9%0 represents relationship adjustment in the distressed range. The average couple reported being distressed in their relationship before the start of

treatment (M = 88.9, SD = 18.1). For male partners, the mean Brief Symptom Inventory (BSI) Global Severity Index (GSI) T score using adult psychiatric outpatient norms was 45.2 (SD = 13.8). For female partners, the mean BSI GSI T score using adult psychiatric outpatient norms was 39.1 (SD = 9.8).

Therapists. Therapists with varying level of training and orientation participated in the study. Therapists included licensed psychologists, psychology interns, a psychology graduate student, Marriage and Family Therapists (MFT), and MFT trainees. Therapists saw couple clients either conjointly as a therapist team or individually on their own. Therapists' level of experience was coded the following way: 0 = MFT trainees, 1 = Psychology trainees, 2 = Psychology interns, 3 = master's level therapists, and 4 = Ph.D. level therapists. For therapists that worked together conjointly as a therapist team, their experience level was coded as the mean experience level of the two therapists.

### Procedure

All couples who were in heterosexual relationships and were determined to be appropriate for treatment through the clinics were asked to participate during their initial appointment. Couples were informed that the research and regular clinic procedures are virtually the same; however, their participation allowed their data to be used as part of the larger study. Final data on participation rates are not yet available; however, it was anticipated that 90% or more of couples seen through the clinics participated in the study.

Before the start of treatment, participants completed a series of questionnaires about their demographics, individual, and relationship functioning. Throughout the course of therapy, therapists documented through an electronic form the contents covered and techniques used in each session. All procedures were approved by the IRBs at both clinic sites as well as the Texas A&M University IRB.

#### Measures

Described below are the questionnaires that were used in the present study.

Except where noted, measures were administered only at the pre-treatment assessment.

Demographics Questionnaire. Prior to the start of therapy, participants completed the demographics form, which included questions on age, ethnicity, religiosity, education, income, relationship status, and relationship history (see Appendix B).

Therapist Records. After the completion of each therapy session, therapists documented through a standardized electronic progress note the contents covered and techniques used in each session (see Appendix C). Therapists selected the percentage of time spent on target relationship areas, non-target relationship areas, male partner's individual problems, female partner's individual problems, transportation or scheduling difficulties, and other non-relationship topics. Additionally, the therapists checked off the techniques used in session. Techniques included communication training, problem-solving training, behavioral homework, discussing relationship cognitions, emphatic joining, discussing couple patterns, tolerance discussion and/or role-playing dysfunctional behaviors, and discussing upcoming events. This list of possible

techniques was generated in consultation with the clinic heads at both sites to represent the therapy techniques that are typically used at that site. Therefore, therapists in each site were likely to be familiar with the techniques described on the checklist. The clinic note was standardized across sites.

To minimize the number of analyses, content areas and techniques were collapsed into broader codes if they satisfied two criteria: they were similar enough in content that combining codes would not overly sacrifice interpretation and, when modeled in the analyses described below, showed similar types of change across time. According to these guidelines, male partner's individual problem areas and female partner's individual problem areas were combined into a general "partner's individual problem" code. Transportation or scheduling difficulties and other non-relationship topics were combined into a general "other problems" code. Communication training, problem-solving training, and behavioral homework were combined into a general "behavioral techniques" code. Empathic joining and discussing couple patterns were combined into the "acceptance techniques code" and tolerance discussion and/or roleplaying dysfunctional behaviors, and discussing upcoming events were combined into the "tolerance techniques" code. The combining of codes resulted in a total of five therapist technique codes (behavioral techniques, discussing recent/ongoing conflict or problem, discussing relationship cognitions, acceptance techniques, and tolerance techniques) and four session content codes (couple's target relationship area, non-target relationship areas, partner individual problems, and other problems).

Quality of Marriage Index (QMI; Norton, 1983). The QMI is a six-item self-report questionnaire that assessed relationship satisfaction. Respondents indicated their level of agreement to broad, general statements such as "We have a good relationship" and "Our relationship is strong." The last question on the QMI is a 10-point scale that asks respondents to rate how happy they are in their relationship, all things considered. The QMI has been found to have high internal consistency (Cronbach's alpha = .97; Heyman, Sayers, & Bellack, 1994). Participants completed this questionnaire prior to the start of therapy as well as before each therapy session (see Appendix D for the full weekly questionnaire).

Brief Symptom Inventory (BSI; Derogatis, 1993). The BSI is a 53-item self-report questionnaire designed to reflect psychological symptom patterns of psychiatric and medical patients as well as non-patient respondents. Each item of the BSI is rated on a five-point scale of distress ranging from "not at all" to "extremely." Internal consistency established on a sample of 719 psychiatric outpatients showed that the internal consistency for all symptom dimensions was high, with Cronbach's alpha ranging from .71 to .85 (Derogatis). The BSI has also demonstrated high test-retest reliability as well as convergent validity, discriminate validity, predictive, and construct validity.

Responses to Conflict (RTC; Birchler & Fals-Stewart, 1994). The RTC is a self-and partner-report measure of conflict management. The published RTC (Birchler & Fals-Stewart) contains 24 items providing information on how often one and one's partner engage in maladaptive responses to relationship conflict such as "hit, bite, scratch," "criticize," and "refuse to talk about it." The 24-item RTC scale was shown to

have high internal consistency (Cronbach's alpha = .87), test-retest reliability, construct and discriminant validity. For this study, four constructive responses to conflict were added to the questionnaire: (1) Focus on solving problem; (2) Discuss differences constructively; (3) Find alternatives; and (4) Negotiate and compromise. As a result, 8 items were added as participants reported on both their own behaviors and their partners' behaviors. The RTC questionnaire used for this study is presented in Appendix E. *Statistical Analysis* 

Analytic Approach. The two study aims were explored using hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002). HLM is a flexible analytic approach to couple longitudinal data (Atkins, 2005) that can account for the non-independence of data caused by the nesting of assessments within individuals over time, the nesting of individual spouses within couples, and the nesting of couples within their therapists.

Equations. Aim 1 examined changes in therapist techniques and session content over the full course of therapy using Equation 1. At Level 1, the variability due to time for a couple is modeled by an individual intercept (initial status,  $\pi_{0ij}$ ), a slope (linear change,  $\pi_{1ij}$ ), and a quadratic term (acceleration or deceleration of change,  $\pi_{2iJ}$ ). At Level 2, the variability due to differences between couples was modeled. Specifically, the individual intercept, slope, and quadratic terms in Level 1 were modeled as a function of the grand mean across couples ( $\beta_{00j}$ ,  $\beta_{10j}$  and  $\beta_{20j}$ ) and systematic variance attributable to between couple variability (  $r_{0ij}$ ,  $r_{1ij}$ , and  $r_{2ij}$ ). Finally, at level 3, the average therapists intercepts, slopes, and quadratics were modeled by overall averages ( $\gamma_{000}$ ,  $\gamma_{100}$ , and  $\gamma_{200}$ ) and corresponding variance components ( $u_{00i}$ ,  $u_{10j}$ , and  $u_{20i}$ ) that captured the variability

due to the therapist around the overall averages for all therapists. The two VA sites (San Diego, CA or Charleston, SC) were added as a predictor in Level 3 to account for any potential systematic differences by site. The dependent variable for all two aims in the study was the percentage or probability of therapy techniques and session content within a particular session. Given the variability in the couple's target relationship area, this session content was kept as a continuous variable and transformed by taking the natural log of (100-X +1) to normalize the data. As a result of this transformation, the direction of the resulting statistical coefficients were reversed, so that they actually represents the amount of time *not* spent on couple's target relationship area. All other session content variables were recoded into a dichotomous yes/ no variable because the codes were strongly bimodal in nature. In the equations presented below, *t* indexes time, *i* indexes couples, and *j* indexes therapists.

Level 1 (variability due to time)

$$Y_{tij} = \pi_{0ij} + \pi_{1ij}(Session)_{tij} + \pi_{2ij}(Session^2)_{tij} + e_{tij}$$
(1)

Level 2 (variability due to couples)

$$\pi_{0ii} = \beta_{00i} + r_{0ii}$$

$$\pi_{1ij} = \beta_{10j} + r_{1ij}$$

$$\pi_{2ij} = \beta_{20j} + r_{2ij}$$

Level 3 (variability due to therapist)

$$\beta_{00i} = \gamma_{000} + \gamma_{001}(Site) + u_{00i}$$

$$\beta_{10i} = \gamma_{100} + \gamma_{101}(Site) + u_{10i}$$

$$\beta_{20j} = \gamma_{200} + \gamma_{201}(\text{Site}) + u_{20j}$$

Aim 2 of the present study investigated how clients' pre-treatment characteristics (e.g., demographics, relationship satisfaction, and individual functioning) as well as therapist characteristics (e.g., level of experience and gender) related to therapist techniques and session content. Additionally, so that differences in change in relationship satisfaction were not confounded with client or therapist characteristics, average relationship satisfaction across sessions was entered as a control variable in Level 2. Aim 2 investigated using similar HLM equations as described above. The equation for level 1 remained the same. However, more predictors were added for Level 2 and 3. Specifically, couple predictors were added in Level 2, and therapist predictors were added in Level 3.

#### **RESULTS**

Aim 1

Therapist Technique. Therapist technique use over time was modeled using Equation 1, a basic three-level model that described the trajectory of change for technique use with intercept, slope, and quadratic components. To be conservative, robust standard errors were used for all of Aim 1 analyses. In the first session, therapists used acceptance techniques approximately 86 percent of the time, discussed a recent or ongoing conflict or problem 71 percent of the time, applied behavioral techniques 25 percent of the time, explored relationship cognitions 11 percent of the time, and used tolerance techniques three percent of the time (Figure 1). There was a significant difference across the two sites in how much therapists used acceptance techniques in the first session. Specifically, therapists in San Diego, CA used more acceptance techniques in the first session than therapists did in Charleston, SC (b = 1.32, OR = 3,74, p < .05). However, none of the other techniques used in the first session significantly differed by site.

The slope and quadratic components in Equation 1 modeled the trajectory of change in technique use after the first session (Table 1 and Figure 1). Significant linear increase in the likelihood of acceptance technique (b = -.06, OR = .95, p < .05) was found throughout the entire course of therapy. There was also a significant linear increase in the likelihood of behavioral techniques being used as therapy progressed (b = .27, OR = 1.31, p < .01), but this increase slowed towards the end of treatment (b = -.01, OR = .99, p < .01). There were no significant linear or quadratic changes in the other

techniques. There were also no significant site differences in the linear or quadratic trajectories of change for any of the techniques.

Session Content. Session content over time was also modeled using Equation 1 to describe the trajectory of change with intercept, slope, and quadratic components. Therapists reported spending approximately 93 percent of the first session discussing couples' target relationship areas (Figure 2). The other topics assessed were infrequently covered in the first session. Indeed, individual problems were discussed in 21 percent of first sessions, "other" problems were discussed in 11 percent of first sessions, and nontarget relationship areas were discussed in 10 percent of first sessions (Figure 3). There were significant differences across the two sites in how often the four session contents were covered in the first session. Therapists in San Diego, CA spent somewhat less time during the first session on couple target relationship areas than therapists did in Charleston, SC in the first session (b = 2.09, p < .01). Instead, therapists in San Diego, CA were more likely to cover non-target relationship area (b = 2.38, OR = 10.78, p < 0.00.01), partner's individual problems (b = 1.44, OR = 4.24, p < .05), and other problems (b = 1.44), partner's individual problems (b = 1.44), DR = 4.24, DR = 4.2= 2.01, OR = 2.01, p < .01) than the therapists in Charleston, SC. None of the slope or quadratic components for the session contents were significant, indicating that session content did not significantly change over the course of therapy. There were also no significant site differences in the linear or quadratic trajectories of change for any session content.

#### Aim 2

Predictors of Technique. The next step of our analysis modeled how clients' pretreatment characteristics (e.g., demographics, relationship satisfaction, and individual functioning; added in Level 2) or therapist characteristics (e.g., level of experience and gender; added in Level 3) related to therapist techniques after controlling for early treatment outcome. Table 3 presents the tests of each predictor for the intercept, slope, and quadratic change components. Robust standard errors were used whenever they were available. Because of the complex nature of the analyses and limited sample size for some analyses, a number of models did not converge; those models that failed to converge are noted in Table 3.

Demographic Factors. Several demographic factors (length of relationship, number of children the couples has in their current relationship, age, ethnicity, years of education, income, and impact of religion on life) were individually tested to explore how they relate to therapist techniques. Therapists generally used cognitive techniques (e.g., discussed relationship cognitions) less when the male partner in the relationship was African American in comparison to when the male partner was Caucasian, as indicated by the significant intercept (b = -5.88, OR = .00, p < .05). The probability of discussing relationship cognitions at the start of treatment with couples in which the male partner was African America was .003, in comparison .09 when the male partner was Caucasian (Figure 4). This difference remained consistent throughout the course of therapy. As therapy progressed, therapists decreased their use of cognitive techniques more for older couples than for younger couples (b = -.01, OR = .99, p < .05; Figure 5).

The rate of using behavioral techniques accelerated as therapy progressed for couples with more children, as indicated by the significant quadratic change component (b = .00, OR = 1.00, p < .05; Figure 6).

Relationship Factors. Several relationship factors (satisfaction, closeness, and various response styles to conflict) were individually tested to explore how they relate to therapist techniques. Therapists used cognitive techniques less in the first session with couples who were more satisfied in their relationship (b = -.09, OR = .91, p < .01). Specifically, the probability of therapists discussing relationship cognitions with satisfied couples was 0.03, in comparison to 0.07 for the average couple. However, the probability of discussing relationship cognitions linearly increased over time with these more satisfied couples (b = .01, OR = .01, p < .05; Figure 7). Therapists' use of tolerance techniques increased over time with couples who had a more passive response style of conflict (i.e., sarcasm, criticism, sulking, ignoring, refusal to talk about it, leaving the scene, crying) (b = .01, OR = 1.01, p < .05); However, the increase in using tolerance techniques slowed down over time (b = -.00, OR = 1.00, p < .05; Figure 8).

Individual Psychological Functioning. Neither male nor female partners' psychological symptoms significantly predicted therapist techniques.

Therapist Characteristics. Therapists' level of experience and gender were individually tested to explore how they relate to therapists' technique use. Therapists' gender predicted several differences in therapists' reported technique use. Specifically, when cotherapy teams were comprised of two men rather than a coed team of therapists, there were significant differences in slope and quadratic change for the discussion of

recent or ongoing conflict or problem (Figure 9) and for tolerance techniques (Figure 10). A team of all male therapists typically decreased discussions of recent/ ongoing conflict or problems (b = -.31, OR = .73, p < .05) and the use of tolerance techniques (b = -1.49, OR = .23, p < .05) as therapy progressed. However, the rate of using these techniques flattened over time (for recent or ongoing conflict or problem: b = .01, OR = 1.01, p < .05; for tolerance techniques: b = .06, OR = 1.07, p < .05) more for all-male therapy teams. Therapists' gender also significantly predicted the quadratic change component for the use of cognitive techniques. There was a non-significant linear trend for all-male therapist teams to use fewer cognitive interventions over time. Furthermore, the rate of using cognitive interventions flattened over time, as suggested by the significant quadratic change component (b = .05, OR = 1.05, p < .05; Figure 11). Finally, therapists' level of experience was related to a deceleration in the use of behavioral techniques toward the end of therapy (b = .00, OR = 1.00, p < .01; Figure 12).

Predictors of Session Content. Models were also fit to explore how clients' pretreatment characteristics (e.g., demographics, relationship satisfaction, and individual functioning; added in Level 2) or therapist characteristics (e.g., experience and gender; added in Level 3) relate to session content after controlling for early treatment outcome. Table 4 presents the tests of each predictor for the intercept, slope, and quadratic change component. Robust standard errors were used whenever they were available. Because of the complex nature of the analyses and limited sample size for some analyses, a number of models did not converge; those models that failed to converge are noted in Table 4.

Demographic Factors. The rate of discussing non-target relationship areas decreased linearly significantly more for older couples than for younger couples (b = -0.01,  $OR = .98 \ p < .01$ ; Figure 13). This differential rate of discussing non-target relationship areas with older couples eventually flattened over time (b = .00, OR = 1.00, p < .05). The number of children had significant effects on both the slope (b = -.09, OR = .92, p < .05) and quadratic (b = .00, OR = 1.00, p < .05) change components for discussions of other problems (Figure 14). Discussion of other problems decreased significantly more over time for couples who had more children. However, this differential rate of discussing other problems flattened over time. While the number of children couples had in their relationship did not have a significant effect on the slope change component for discussions of partner's individual problems, the rate of discussing partner's individual problems flattened over time for couples who have more children (b = .01, OR = 1.01, p < .01; Figure 15).

Relationship Factors. For couples who reported a high level of closeness in their relationship, therapists were more likely to decrease focus on couples' target relationship areas as therapy progressed (b = .01, p < .01; Figure 16) than they were for couples with a lower level of closeness. However, this differential decrease flattened over time (b = .00, p < .05). For couples with different levels of closeness, the non-significant intercept for the probability of discussing target relationship areas narrowed over time. Couples' passive response to conflict predicted a more positive slope change component for discussions of other problems (b = .01, OR = 1.01, p < .01), followed by a more negative quadratic component (b = .00, OR = 1.00, p < .01; Figure 17). Discussions of other

problems increased over time for couples who had a passive response style to conflict, but the rate of the increase slowed over time. Similar to the findings on how couple's closeness related to discussions of target relationship areas, the non-significant difference in intercept for the probability of discussing other problems narrowed over time.

Individual Psychological Functioning. There were no significant findings on how the male or female partners' psychological symptoms related to session content.

Therapist Characteristics. All-male therapy teams initially discussed target relationship areas significantly less than coed therapy teams (b = 1.66, p = .05). For allmale therapy teams, the likelihood of discussing target relationship areas at the start of treatment was 67.77% compared to 94.66% and 90.21% for coed and all-female teams, respectively. However, the percentage of discussing target relationship area by all-male therapy teams increased significantly more rapidly than for coed teams as therapy progressed (b = -.30, p < .01). However, the rate of this increase slowed over time (b =.01, p < .01) such that, toward the end of therapy, the percentage of time spent focusing on target relationship areas for coed, all male, and all female therapist teams were similar (Figure 18). All male therapist teams initially discussed other problems significantly more than coed therapist teams (b = 4.22, OR = 67.9, p < .01) in the first session. For all-male teams, the probability of discussing other problems at the start of treatment was as high as .77, compared to probabilities of .05 and .07 for coed and allfemale teams, respectively (Figure 19). This initial high probability of discussing other problems by male therapist teams was followed by a more rapid linear decrease (b = -

1.15, OR = .32, p < .05) and subsequent flattening out (b = .05, OR = 1.05, p < .05) than observed in coed therapy teams.

#### DISCUSSION

The present study takes a first step towards examining therapy techniques and session content used in care-as-usual couple therapy. In Aim 1, levels and changes in therapist techniques and session content over the course of therapy were examined. Over an average course of therapy, therapists generally used acceptance techniques and discussion of recent or ongoing conflict or problem the most. It was striking how few changes there were in therapist techniques and session content over time, suggesting that therapists had a tendency to apply the same techniques consistently over time. The use of acceptance and behavioral techniques were the only techniques that had significant trajectories of change over time. Although there was a significant decrease in the use of acceptance techniques over the course of therapy, the probability of using acceptance techniques over an average course of therapy remained high (.82 at the 7<sup>th</sup> session). In fact, the probability of using acceptance techniques was higher than the probability of any other technique throughout an average length of treatment. This result demonstrated therapists' preference in using acceptance technique over other techniques. As treatment progressed, therapists had a 1.31 greater chance of using a behavioral technique for every session that occurred until this rate slowed toward the end of treatment. This suggested that as treatment progressed, therapists were likely to increase structure in treatment by using more behavioral techniques.

There has been little research on how client's pre-treatment characteristics as well as therapist characteristics related to therapists' technique and session content. Aim 2 of the present study sought to expand research in this area. Overall, there were

relatively few predictors of change in therapy techniques and session content. These general results suggested that couple pre-treatment characteristics and therapists characteristics did not affect therapy technique and session content very much. Previous research suggested that little predicts therapy outcome (Atkins et al., 2005). It is likely that the lack of predictors in therapy techniques and session content is related to the lack of predictors for outcome. Furthermore, where there were significant linear and change components for a particular technique or session content, the quadratic change component tended to be in the opposite direction as the linear component, reducing any differences that were present early in treatment. Presented below are some notable findings on how demographic, relationship, individual psychological functioning, and therapist characteristics related to therapist techniques and session content.

# Demographic Factors

Therapists used less cognitive techniques throughout the course of therapy with couples that had an African American male partner than with couples that had a Caucasian male partner. Given that use of cognitive techniques did not differ by education or income level, this may have been a result of stereotyping. Therapists also decreased the use of cognitive techniques more for older couples than for younger couples. Given that this sample of couples is relatively older (M = 47.7, SD = 12.8) with the oldest couples' ages averaging at 81, therapists may have been decreasing the use of these techniques with older couples because these couples may not be as cognitively sharp as younger couples. Alternatively, because younger couples were more likely to be OEF/OIF veterans and perhaps suffering from more recent relationship distress created

by deployments or other stressors, therapists may have felt that cognitive techniques became more important for younger couples over time.

## Relationship Factors

Therapists used significantly more cognitive techniques during the first session with more distressed couples than with more satisfied couples. It is possible that therapists used this technique to contain the distress these couples bring into therapy by making the conversation more intellectual and less emotional. Therapists' use of tolerance techniques increased over time with couples who had a more passive response style to conflict. Therapists may have chosen to gradually increase their use of tolerance techniques such as role-playing dysfunctional behaviors or discussing an upcoming event as treatment progressed to help couples be more involved in therapy. Therapists may have chosen to increase tolerance techniques over time because couples with a passive response style may avoid being engaged in such intensive tasks at the very start of treatment. Such role-playing and discussions may have also been safer for passive couples to try out as therapy progressed and they built a closer alliance with the therapists. There was also an increase in discussion of other topics over time for couples with a passive response style conflict. This pattern may have reflected couples' pull for the therapists to focus on topics that were not central to the relationship as therapy progressed. While levels of passive response style to conflict did not predict a significant intercept for the probability of discussing other problems, the likelihood of discussing other problems for couples who had the most passive response styles in comparison to couples with less passive styles was the lowest at the start of treatment. It is possible that these couples, who may have a tendency to withdraw, did not interrupt the therapists' attempt to direct the therapy content early on in therapy. However, as therapy progressed, they may have pulled for the therapists to focus on other issues because they needed to distance from more intense problems. While levels of closeness did not predict a significant intercept, the probability of focusing on target relationship areas was highest for couples who reported a high level of closeness. This probability then significantly decreased over time, such that toward the end of treatment, the difference among the probabilities of focusing on target relationship areas for couples with varying levels of closeness were decreased. This pattern suggested that a couple's higher levels of closeness may facilitate the discussion of target relationship areas earlier in therapy followed by a natural decrease in exploring these same areas as therapy progressed. This finding seemed consistent with the finding from previous research (Atkins et al., 2005) that couples with greater closeness initially improved in therapy and then decelerated in their change over time; the high probability of staying on target relationship areas for couples who reported to a high level of closeness may lead to greater initial improvement in therapy.

# Individual Psychological Functioning

The male or female partner's individual psychological functioning did not have an effect on change in therapist techniques or session content. This suggests that couple therapists are unlikely to tailor their interventions based on one partner's individual functioning. Couple therapists may be more likely to focus on relationship dysfunction rather than on comorbid individual dysfunction. Given that most participants in the

present study reported an average level of individual dysfunction for adult psychiatric outpatient settings, it is also possible that therapists applied similar techniques to address individual psychological functioning for most couples.

## Therapist Characteristics

A team of all-male therapists had a tendency to decrease certain technique use over time. This decrease in technique use by all-male therapist teams was significant for both the discussion of recent/ongoing conflict or problem and for the use of tolerance techniques. While not significant, there was also a trend to decrease the use of cognitive techniques over time. Unfortunately, the model exploring the relation of therapist gender on the use of behavioral techniques did not converge. It is possible that all male therapists teams used more behavioral techniques as opposed to the other techniques examined. All-male therapists teams tended to focus on different content than coed therapists teams did. While all-male therapists teams were less likely than coed therapist teams to focus on target relationship areas at the start of treatment, they were more likely than coed therapist teams to focus on discussing other problems. The tendency for allmale therapist teams to focus on other problems rather than on target relationship areas at the start of treatment may be related to male therapists' tendency to be more cautious when they pick up non-attentive cues from couples (Brown-Standridge & Piercy, 1988). Furthermore, previous studies on family therapy demonstrated that female therapists are more likely to respond with structuring than were male therapists (Newberry et al., 1991). The tendency for female therapists to use structure more than male therapists do may have facilitated the higher probability of discussing couples' target relationship

areas by the coed or all-female therapist teams than by all-male teams. Although there is a lack of previous research on the effect of therapist gender on technique use and session content, a few studies have explored the impact of therapist gender on treatment outcome. A meta-analysis on individual therapy (Bowman, Scogin, Floyd, & McKendee-Smith, 2001) found a significant small effect size favoring female therapists (d = .04), but this effect size is not of sufficient magnitude to be clinically significant. A review of more recent studies by Beutler et al. (2004) found no effect on therapist gender and client drop out. A review of couple and family therapy (Bischoff & Sprenkle, 1993) found some modest evidence that matching gender of therapist and client diminishes premature termination. Future research should illuminate whether the difference in technique use and session content by therapists of different genders mediates the relation between therapist gender and premature termination.

### Limitation and Future Directions

The results of the present findings should be interpreted with caution due to a number of limitations. First, therapy techniques and session content were measured using a self-report measure, which was susceptible to reporting bias. This presented a particular challenge for interpreting the effect of therapist characteristics on technique use and session content because the significant findings may have been due to a reporting difference among therapists with different characteristics. Furthermore, each individual therapist may have had a slightly different interpretation of the techniques and contents listed on the checklist. Therapists also may not be the best reporters of what happens in session. Future research should employ other measurement techniques such

as coding actual session transcripts or videotapes. Second, the sample size of the present study was limited. This presented a challenge for running complex statistical models for analyses. Future studies should use a larger sample size. Third, our measures of therapist characteristics were limited to observable traits and states (Beutler et al., 2004). Future studies can examine other therapist characteristics such as personality, values, and therapists' view of the therapeutic relationship. Furthermore, our measure of therapist level of experience assessed level of education and did not tap variability in clinical expertise or experience in couple therapy. Future studies should employ more precise measures. Third, the present study may not be generalizable to couple therapy outside of the VA healthcare system because couples in the VA healthcare systems may face unique challenges, such as dealing with deployment, that couples outside the VA healthcare system may not face. Future studies may expand this by investigating technique use and session content in other community settings. Despite these limitations, the present study offers a first look into therapist techniques and session content in careas-usual couple therapy. Without the knowledge of what actually happens in therapy, it would be a challenge to make therapy more effective.

### CONCLUSION

Therapists frequently used acceptance techniques and discussion of recent or ongoing conflict or problem. Therapists typically used the same levels of techniques and session contents over a course of therapy. In addition, there were relatively few predictors of change in therapy techniques and session content. Future research should employ other measurement techniques, examine other therapist characteristics, employ more precise measures, and investigate technique use and session content in other community settings. Despite these limitations, the present study offers a first look into therapist techniques and session content in care-as-usual couple therapy. Without the knowledge of what actually happens in therapy, it would be a challenge to make therapy more effective.

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# APPENDIX A

Table 1
Therapists' technique use over time

Technique	b	SE	df	OR
Behavioral				
Slope	.27**	.05	27	1.31
Quadratic	01**	.00	27	.99
Recent/ ongoing conflict or problem				
Slope	.03	.02	562	1.03
Quadratic	00	.00	562	1.00
Relationship cognition				
Slope	.12	.79	27	1.13
Quadratic	00	.03	27	1.00
Acceptance				
Slope	06*	.03	563	.95
Quadratic	.00	.00	563	1.00
Tolerance				
Slope	.14	.04	562	1.15
Quadratic	00	.00	27	1.00

*Note.* OR = Odds Ratio.

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

Table 2
Session content over time

Session Content	b	SE	df	OR
Couple's target relationship area Slope	.01	.02	112	
Quadratic	.00	.00	112	
Non-target relationship area				
Slope	.04	.03	577	1.04
Quadratic	00	.00	577	1.00
Individual problem				
Slope	.01	.03	27	1.01
Quadratic	00	.00	27	1.00
Other problem				
Slope	.03	.08	27	1.03
Quadratic	.00	.00	27	1.00

*Note.* OR = Odds Ratio.

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

Table 3

Prediction of therapist technique use from client and therapist characteristics

	Ве	ehavio	oral	Recent/ o	ongoing co problem	onflict or		lationsh ognition		Ac	eceptar	nce	T	olerance	
Predictor	b	SE	OR	b	SE	OR	b	SE	OR	b	SE	OR	b	SE	OR
Length of relationship															
Intercept	a	a	a	00	.02	1.00	02	.03	.98	.01	.04	1.01	00	.02	1.00
Slope	a	a	a	00	.00	1.00	00	.00	1.00	.00	.00	1.00	.00	.01	1.00
Quadratic	a	a	a	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00	00	.00	1.00
Children with partner															
Intercept	.03	.26	1.03	18	.22	.84	41	.33	.67	.13	.46	1.14	26	.41	.77
Slope	07	.06	.93	00	.04	1.00	00	.05	1.00	06	.09	.84	00	.07	1.00
Quadratic	.00*	.00	1.00	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00
Age															
Intercept	.01	.02	1.01	.00	.02	1.00	.04	.03	1.04	.21	.02	1.02	.02	.04	1.02
Slope	00	.00	.99	.00	.00	1.00	01*	.01	.99	.00	.00	1.00	01	.01	.99
Quadratic	.00	.00	1.00	00	.00	1.00	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00

Male partner's ethnicity

African American-	a	a	a	86	.63	.42	- 5.88*	2.76	.00	.67	1.22	1.95	-4.96	41.97	.01
intercept															
African American-	a	a	a	.21	.15	1.24	.78	.42	2.18	45	.34	.63	.12	9.40	1.12
slope															
African American-	a	a	a	01	.01	.99	02	.02	1.44	.03	.02	1.03	01	.45	.99
quadratic															
Other-intercept	a	a	a	-1.46	.90	.23	-4.24	6.65	.01	.55	1.17	1.73	-1.46	2.36	.23
Other-slope	a	a	a	.36	.20	1.43	.36	.72	.98	29	.22	.75	06	.34	.94
Other-quadratic	a	a	a	01	.01	.99	01	.02	.99	.01	.01	1.01	.01	.01	1.01
Female partner's ethnicity															
African American-	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
intercept															
African American-	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
slope															
African American-	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
quadratic															
Other-intercept	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
Other-slope	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a

Other-quadratic	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
Years of Education															
Intercept	.06	.50	1.07	.10	.12	1.11	18	.79	.84	04	.13	.96	.02	.22	1.02
Slope	03	.00	.97	.02	.02	1.02	00	.21	1.00	.02	.02	1.02	01	.03	.99
Quadratic	.00	.00	1.00	00	.00	1.00	.00	.00	1.00	00	.00	1.00	00	.00	1.00
Income															
Intercept	a	a	a	00	.00	1.00	00	.00	1.00	00	.00	1.00	.00	.00	1.00
Slope	a	a	a	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00	00	.00	1.00
Quadratic	a	a	a	00	.00	1.00	00	.00	1.00	00	.00	1.00	.00	.00	1.00
Impact of religion															
Intercept	a	a	a	.05	.11	1.05	.18	.15	1.20	.26	.14	1.30	a	a	a
Slope	a	a	a	01	.02	.99	04	.03	.96	02	.02	.98	a	a	a
Quadratic	a	a	a	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00	a	a	a
Satisfaction															
Intercept	a	a	a	.03	.03	1.03	- .09**	.03	.91	01	.03	.99	05	.05	.95
Slope	a	a	a	01	.01	.99	.01*	.01	1.01	00	.00	00	.01	.01	1.01
Quadratic	a	a	a	.00	.00	1.00	00	.00	1.00	.00	.00	.00	00	.00	1.00
Closeness															

Intercept	a	a	a	.04	.04	1.04	09	.52	.91	.00	.05	1.00	03	.05	.97
Slope	a	a	a	01	.01	.99	.02	.17	1.02	01	.01	.99	.01	.01	1.01
Quadratic	a	a	a	.00	.00	1.00	00	.01	1.00	.00	.00	1.00	00	.00	1.00
Active response to conflict															
Intercept	a	a	a	03	.02	.97	.04	.03	1.04	.04	.02	1.04	.01	.02	1.01
Slope	a	a	a	.01	.00	1.01	01	.01	.99	01	.00	.99	.00	.00	1.00
Quadratic	a	a	a	00	.00	1.00	.00	.00	1.00	.00	.00	1.00	00	.00	1.00
Passive response to conflict															
Intercept	a	a	a	02	.02	.98	.03	.02	1.03	.04	.02	1.04	01	.02	.99
Slope	a	a	a	.00	.00	1.00	00	.00	1.00	00	.00	1.00	.01*	.00	1.01
Quadratic	a	a	a	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00	00*	.00	1.00
Constructive response to															
conflict															
Intercept	a	a	a	.00	.02	1.00	06	.03	.94	01	.03	.99	05	.03	.95
Slope	a	a	a	00	.00	1.00	.01	.01	1.01	00	.00	1.00	.00	.00	1.00
Quadratic	a	a	a	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00

Male partner's

psychological symptoms

Intercept	.01	.04	1.01	.00	.04	1.00	06	.07	.94	.06	.05	1.06	.08	.07	1.09
Slope	.00	.00	1.00	01	.01	.98	.01	.01	1.01	02	.01	.98	02	.01	.98
Quadratic	00	.00	1.00	.00	.00	1.00	00	.00	1.00	.00	.00	1.00	.00	.00	1.00
Female partner's															
psychological symptoms															
Intercept	.02	.04	1.02	.02	.03	1.02	.09	.06	1.10	01	.04	.99	.04	.07	1.04
Slope	00	.01	.99	00	.01	1.00	01	.01	.99	.01	.01	1.01	00	.01	1.00
Quadratic	.00	.00	1.00	00	.00	1.00	.00	.00	1.00	00	.00	1.00	.00	.00	1.00
Therapist's gender															
Women-intercept	a	a	a	34	.66	.71	.49	1.00	1.64	36	.84	.70	-1.14	1.22	.31
Women-slope	a	a	a	06	.11	.94	21	.17	.81	03	.13	.97	03	.16	.97
Women-quadratic	a	a	a	.00	.00	1.00	.01	.01	1.01	00	.01	1.00	.01	.01	1.01
Men-intercept	a	a	a	.01	.70	1.01	1.10	1.39	3.00	14	.77	.87	1.53	1.47	4.60
Men-slope	a	a	a	31*	.15	.73	82	.43	.44	.04	.15	1.05	-1.49*	.73	.23
Men-quadratic	a	a	a	.01*	.01	1.01	.05*	.02	1.05	00	.01	1.00	.06*	.03	1.07
Therapist's experience															
Intercept	.07	.22	1.08	19	.32	.83	.00	.45	1.00	.31	.28	.31	.68*	.30	1.97
Slope	.02	.02	1.02	.04	.04	1.04	.10	.08	1.11	00	.04	.99	.03	.03	1.03

Quadratic

-.00\* .00 1.00 -.00 .00 1.00 -.00 .00 1.00 .00 1.00 -.00 .00 1.00

*Note.* OR = Odds Ratio.

<sup>a</sup> This model failed to converge.

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

Table 4

Effect of client and therapist characteristics on session content

		ple's targ onship ar		Non-tar	get relat area	cionship		er's indi problen		Othe	r proble	ems
Predictor	b	SE	OR	b	SE	OR	b	SE	OR	b	SE	OR
Length of relationship												
Intercept	.01	.02	_	.03	.04	1.03	.03	.03	1.03	.03	.02	1.03
Slope	00	.00	_	00	.01	.99	01	.01	.99	00	.00	.99
Quadratic	.00	.00	_	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00
Children with partner												
Intercept	06	.19	_	.39	.44	1.48	.20	.34	1.22	00	.36	1.00
Slope	.00	.02	_	07	.08	.93	13	.07	.88	09*	.04	.92
Quadratic	.00	.00	_	.00	.00	1.00	.01*	.00	1.01	.00*	.00	1.00
Age												
Intercept	.00	.01	_	.02	.04	1.02	.03	.03	1.03	01	.03	.99
Slope	00	.00	_	01*	.01	.98	01	.01	.99	.00	.00	1.00
Quadratic	00	.00	_	.00*	.00	1.00	.00	.00	1.00	00	.00	1.00

Male partner's ethnicity												
African American-intercept	30	.50	_	a	a	a	a	a	a	1.11	1.04	3.05
African American-slope	.03	.09	_	a	a	a	a	a	a	42	.25	.66
African American-quadratic	.00	.00	_	a	a	a	a	a	a	.02	.01	1.02
Other-intercept	81	.58	_	a	a	a	a	a	a	-5.50	30.65	.00
Other-slope	.09	.10	_	a	a	a	a	a	a	.20	8.14	1.22
Other-quadratic	00	.00	_	a	a	a	a	a	a	00	.33	1.00
Female partner's ethnicity												
African American-intercept	a	a	_	a	a	a	a	a	ā	a	a	a
African American-slope	a	a	_	a	a	a	a	a	a	a	a	a
African American-quadratic	a	a	_	a	a	a	a	a	a	a	a	a
Other-intercept	a	a	_	a	a	a	a	a	a	a	a	a
Other-slope	a	a	_	a	a	a	a	a	a	a	a	a
Other-quadratic	a	a	_	a	a	a	a	a	a	a	a	a
Years of Education												
Intercept	.04	.08	_	.01	.17	1.02	07	.11	.94	46	.24	.63
Slope	.00	.01	_	.00	.02	1.00	.04	.03	1.04	.05	.04	1.06

Quadratic	00	.00	_	.00	.00	1.00	00	.00	1.00	00	.00	1.00
Income												
Intercept	.00	.00	_	.00	.00	1.00	00	.00	1.00	.00	.00	1.00
Slope	00	.00	_	00	.00	1.00	00	.00	1.00	00	.00	1.00
Quadratic	.00	.00	_	.00	.00	1.00	.00	.00	1.00	00	.00	1.00
Impact of religion												
Intercept	.00	.07	_	10	.20	.90	.09	.12	1.10	.07	.12	1.07
Slope	.00	.01	_	.00	.05	1.00	.01	.04	1.01	01	.02	.99
Quadratic	00	.00	_	00	.00	1.00	00	.00	1.00	00	.00	1.00
Satisfaction												
Intercept	.00	.02	_	.04	.05	1.04	.00	.06	1.00	00	.044	1.00
Slope	.00	.00	_	00	.00	1.00	02	.01	.99	.00	.01	1.00
Quadratic	00	.00	_	.00	.00	1.00	.00	.00	1.00	.00	.00	1.00
Closeness												
Intercept	04	.02	_	.06	.08	1.06	12	.28	.89	02	.06	.98
Slope	.01**	.00	_	00	.01	1.00	.03	.14	1.03	.00	.01	1.00
Quadratic	00*	.00	_	.00	.00	1.00	00	.01	1.00	.00	.00	1.00

Active response to conflict												
Intercept	.00	.01	_	00	.04	1.00	.02	.02	1.02	06	.02	.95
Slope	00	.00	_	.00	.00	1.00	00	.01	1.00	.01	.01	1.01
Quadratic	.00	.00	_	00	.00	1.00	.00	.00	1.00	00	.00	1.00
Passive response to conflict												
Intercept	.01	.01	_	.01	.03	1.01	.01	.02	1.01	03	.02	.97
Slope	00	.00	_	.00	.00	1.00	.01	.00	1.01	.01*	.00	1.01
Quadratic	.00	.00	_	00	.00	1.00	00	.00	1.00	00*	.00	1.00
Constructive response to												
conflict												
Intercept	.01	.02	_	07	.06	.93	a	a	a	.03	.03	1.03
Slope	.00	.00	_	.01	.01	1.01	a	a	a	01	.01	.99
Quadratic	00	.00	_	00	.00	1.00	a	a	a	.00	.00	1.00
Male partner's psychological												
symptoms												
Intercept	.03	.02	_	.00	.06	1.00	01	.05	.99	.06	.05	1.07
Slope	.00	.00	_	00	.01	1.00	.02	.01	1.02	01	.01	01

Quadratic	00	.00	_	.00	.00	1.00	00	.00	1.00	.00	.00	.00
Female partner's												
psychological symptoms												
Intercept	01	.03	_	07	.05	.94	.10	.06	1.11	0.01	.05	1.01
Slope	.00	.00	_	.01	.01	1.01	00	.01	1.00	.02	.01	1.02
Quadratic	00	.00	_	00	.00	1.00	00	.00	1.00	00	.00	1.00
Therapist's gender												
Women-intercept	.53	.56	_	.86	.78	2.36	83	.91	.44	.39	.80	1.48
Women-slope	03	.05	_	08	.12	.93	.06	.18	1.06	01	.15	.99
Women-quadratic	.00	.00	_	.00	.00	1.00	00	.01	1.00	.00	.01	1.00
Men-intercept	1.66*	0.64	_	-1.72	2.34	0.18	41	.27	1.91	4.22**	1.25	67.9
Men-slope	30**	.08	_	.26	.38	1.30	40	.27	.67	-1.15*	.42	.32
Men-quadratic	.01**	.00	_	01	.01	1.00	.02	.01	1.02	.05*	.02	1.05
Therapist's experience												
Intercept	a	a	_	0.89	1.64	2.43	.54	.36	1.71	11	.45	.89
Slope	a	a	_	47	.44	.63	04	.05	.96	.01	.15	1.01
Quadratic	a	a	_	.01	.01	1.01	.00	.00	1.00	00	.00	1.00

*Note.* OR = Odds Ratio.

<sup>a</sup> This model failed to converge.

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

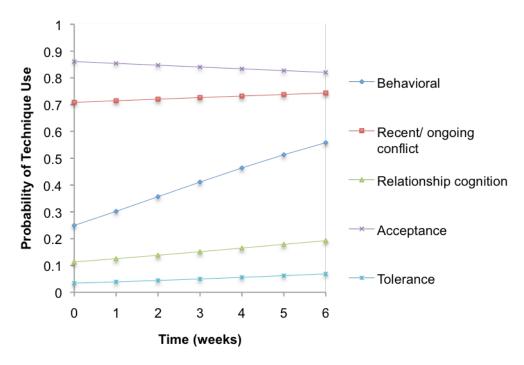


Figure 1. Probability of technique use throughout the course of therapy

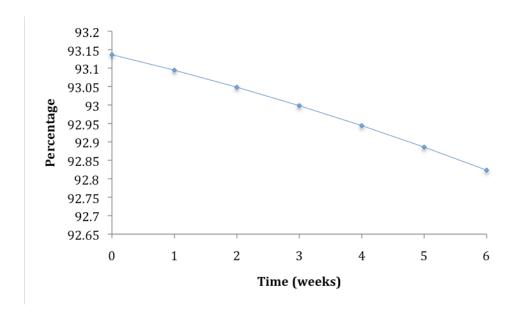


Figure 2. Percentage of discussing couple's target relationship area throughout the course of therapy

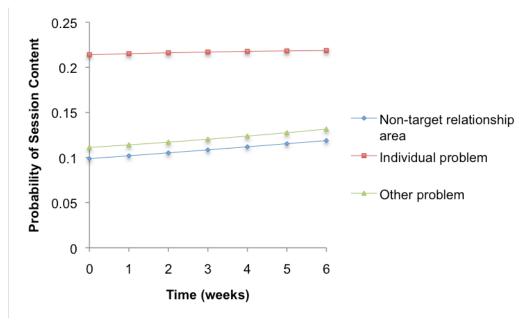


Figure 3. Probability of session content used throughout the course of therapy

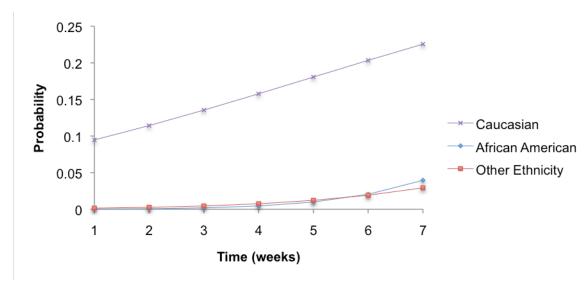


Figure 4. Effect of male partner's ethnicity on probability of discussing relationship cognition

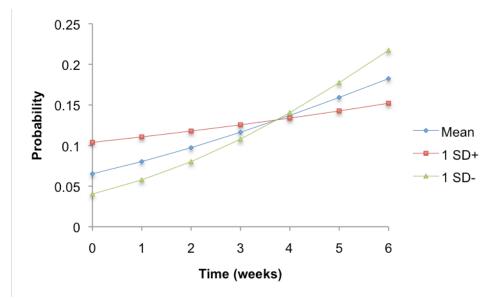


Figure 5. Effect of age on probability of discussing relationship cognition

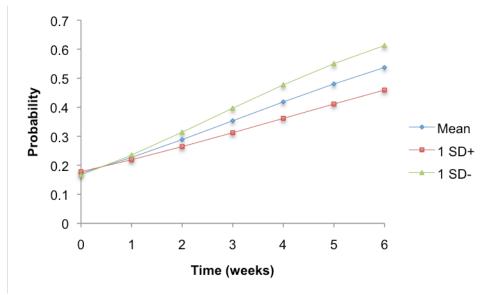


Figure 6. Effect of children with current partner on probability of therapists' use of behavioral techniques

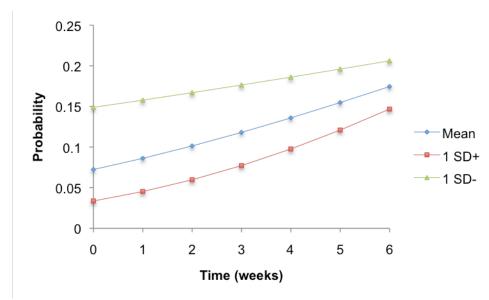


Figure 7. Effect of relationship satisfaction on probability of discussing relationship cognitions

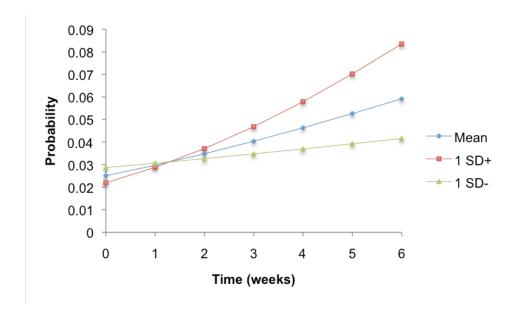


Figure 8. Effect of passive response to conflict on probability of using tolerance techniques

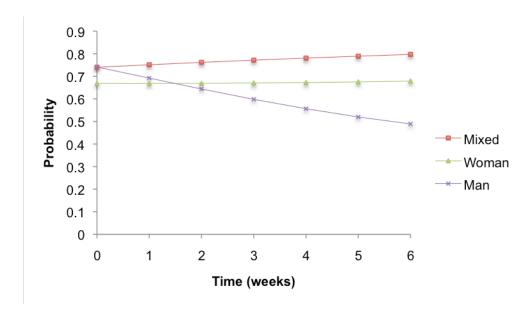


Figure 9. Effect of therapists' gender on probability of discussing recent or ongoing conflict or problem

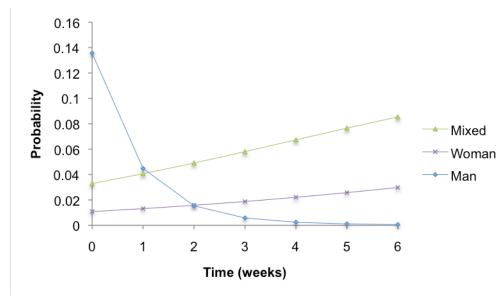


Figure 10. Effect of therapists' gender on probability of using tolerance techniques

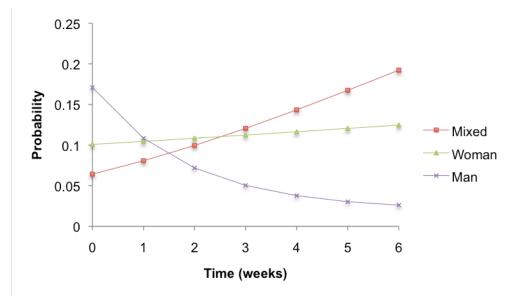


Figure 11. Effect of therapists' gender on probability of discussing relationship cognitions

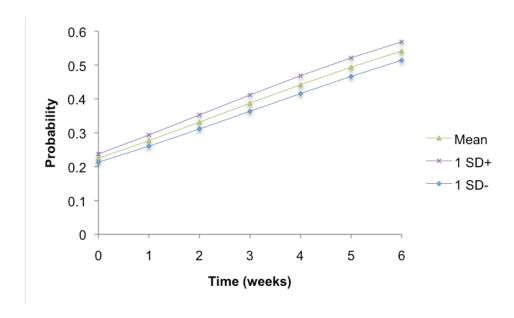


Figure 12. Effect of therapists' experience on probability of using behavioral techniques

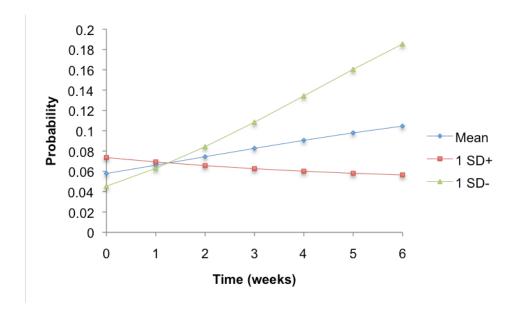


Figure 13. Effect of couples' age on probability of discussing non-target relationship areas

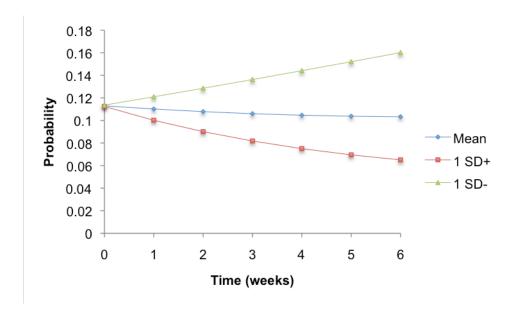


Figure 14. Effect of children on probability of discussing other problems

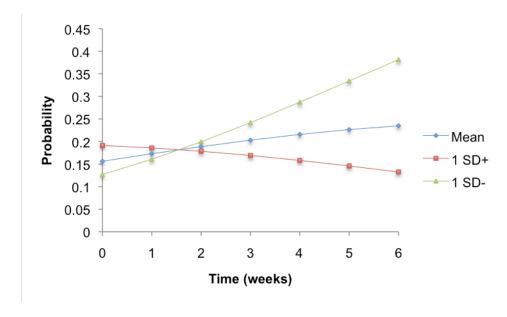


Figure 15. Effect of children on probability of discussing partner's individual problems

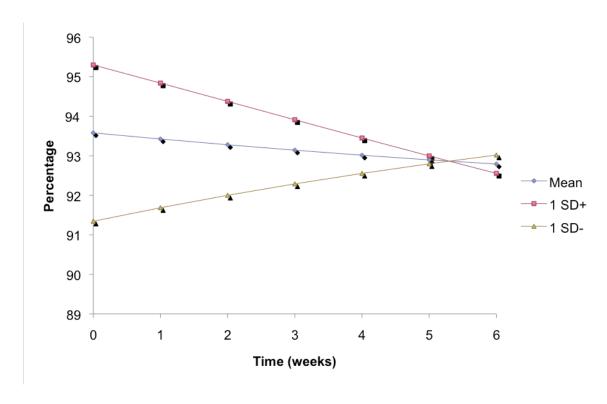


Figure 16. Effect of couples' closeness on percentage of discussing couples' target relationship areas

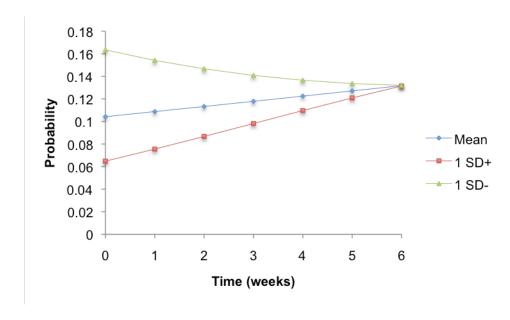


Figure 17. Effect of passive response to conflict on probability of discussing other problems

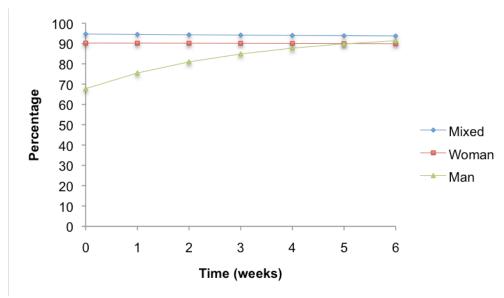


Figure 18. Effect of therapists' gender on percentage of discussing couples' target relationship areas

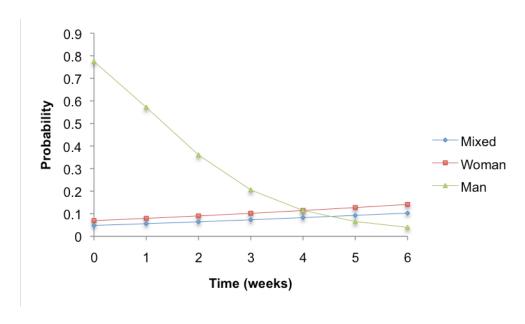


Figure 19. Effect of therapists' gender on probability of discussing other problems

# APPENDIX B

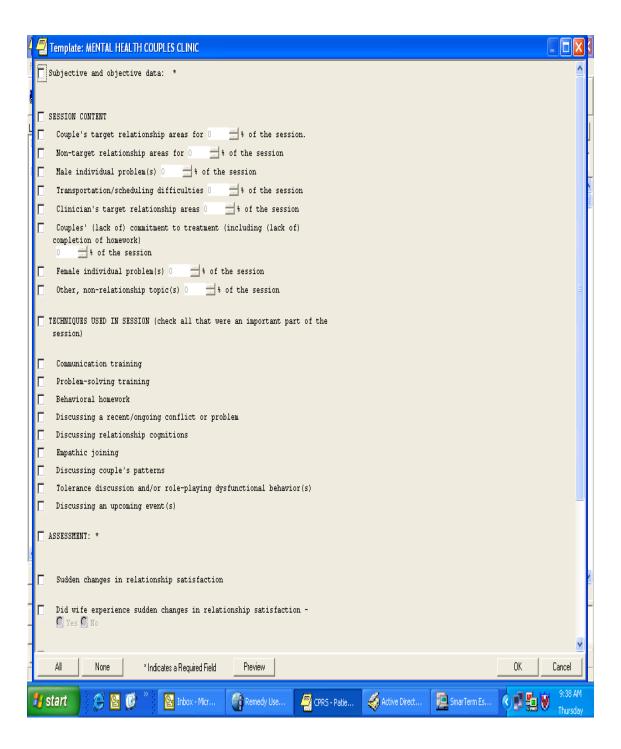
## **DEMOGRAPHICS FORM**

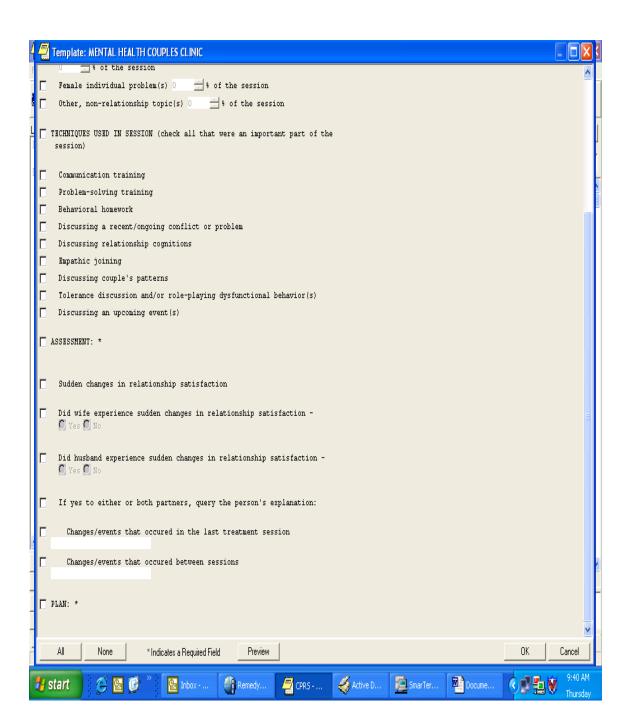
Name:			SSN:	
Relationship Inf	formation:			
Relation	nship status: Married Dating (but	Separated _ not living togethe	Divorced Living T	ogether
Length	of current relationship (years	s)	# years married (if applicab	ole)
# of pre	vious marriages:	# of chi	ldren with current partner _	
Race/Ethnicity:	White/Anglo-Amo	erican	Latino/Hispanic	
	Black/ A	frican-American	Asian/Pacific Islan	nder
	American	n Indian/Alaskan	Other:	
Religion:	Denomination (if any):			
	Impact of religion on life (	1-9; where 1 = no	impact; 9 = very powerful i	impact)
Education:	Years of education:			
	Degrees obtained:	HS Diploma _	GED	_ 2-yr college
		4-yr college	Advanced degree	e (list:)
<b>Employment Sta</b>	atus:			
	Full-time (35+ hou	rs/week)	_ Regular part-time (<35 ho	urs/week)
	Irreg. Part time (da	y jobs)	_ Student (# credits	
	Retired/ Disabled		_ Unemployed	
	Occupation of current or la	st job:		
	IN PAST 5 YEARS:	Longest time wi	th one company	
		# of times quit _ # of times fired	# of times laid off	

Income	e: MONTHLY	income from	MY jo	b/employment \$				
	MO	ONTHLY inco	ome fro	m MY disability/pens	sion paymen	ts \$		_
	MO	ONTHLY inco	me fro	m <u>MY</u> other \$	Des	scribe: _		
Alcoho	l and Drug H	listory:						
	My use caus	ses problem in	work,	school, or at home:	Currently		In past	5 years
	I use in dang	gerous situatio	ns (e.g	., while driving):	Currently		In past :	5 years
	My use crea	tes legal prob	lems (e	.g., arrests):	Currently		In past :	5 years
	I use even th	nough other pe	eople re	ally don't like it:	Currently		In past :	5 years
	I receive trea	atment for my	substa	nce use (e.g., AA):	Currently		In past :	5 years
	I was hospit	alized for my	substar	nce use:			In pa	st 5 years
	If you check	ted one or mor	re of th	e above, which substa	ance(s) are y	ou/were	you us	ing:
Legal I	History:	. 10		0. V	TC.		0. W	N
				ne? Yes No	-			
	If yes, when	?		_ What was the crim	ne?			
Abuse	History:							
	Which of the	e followed has	s happe	ned to you?				
	Physical abu	ise/beatings _		Sexual abuse/rape		Neglec	t/abando	onment
	What age di	d this abuse o	ccur? _	Who abused yo	ou (relation t	o you)?		
	On the follo	wing scale, ho	w muc	h damage did this ab	use do to yo	u? (circl	le #)	
	1	2	3	4 5	6	7	8	9
	No emotion	al damage		Some emotional da	mage A	A lot of	emotion	al damage

#### APPENDIX C

#### THERAPIST RECORDS





# APPENDIX D

# WEEKLY QUESTIONNAIRE

Spouse ID			Session					]				
Since the <u>B</u>	EGINNIN	<u>VG</u> of last s	ession, I an	n feeling _		_ about 1	my 1	relation	ship:			
	O	О	O	O		O		O	(	O		
	Much Worse	Worse	A Little Worse	The Same		A Little Better		Better		luch etter		
Please indicin one circle		vell the fol	lowing state	ements des	cri	be you a	nd y	our ma	rriag	e <u>IN TI</u>	HE LAST	<u>WEEK</u> . (fil
	,			V	Ver	y Strong				Very St	rong	
				DIS	SAC	GREEME	NT		A	AGREE	MENT	
We have a g	ood relation	onship			0	0	O	O	O	0	O	
My relations		-				0	0	0	0	0	O	
Our relation	-		-			O	О	O	O	О	O	
My relations						О	О	О	O	O	О	
I really feel	like part o	f a team wi	th my partn	er	О	О	O	О	O	O	O	
All things co	onsidered,	how happy	are you in	your relatio	nsh	nip? (fill i	in oı	ne circle	)			
	O	0 0	O	0 0	)	O	(	) (	)	O		
UN	Very NHAPPY			Нарру						erfectly APPY		
How often l	have the f	ollowing e	vents occur	red IN TH	IE I	LAST W	EE.	K?				
My partner	insulted m	e/ swore at	me/ yelled	at me:								times
I was afraid	that my pa	artner migh	t hurt me:									times
My partner j	pushed/sla	pped me oi	forcefully	grabbed me	in	anger:						times
My partner i	physically	iniured me	(e.g., bruis	e. sprain. cr	ıt. 1	oroken bo	ne)					times

# IN THE LAST WEEK, how much were you distressed by:

		Not at all	A little bit	Moderately	Quite a bit	Extremely
Feeling blue:		O	О	О	О	O
Feeling fearful:		O	O	O	O	O
Feeling easily annoyed/irr	O	O	O	O	O	
In the past week, how man	-	•			drinks	
In the past week, how man					times	
In the past week, how did	your alcohol or	drug use (or lack	of it) affect y	our relationship	?	
Very bad effect		No effect		Very good	effect	
O	0 0	O	0 0	O		
		RGET BEHAV				
1a) In the past week, how	often (INSERT	BEHAVIOR 1 H	IERE)?			
b) Our conversatio	ns about this bel	havior (or lack of	f behavior) ma	de the behavior	:	
Much worse		No effect		Muc	h better	
O	0 0	O	0 0	O		
c) This behavior, or	r conversations a	about this behavior	or, made me fe	eel:		
Much more distant		No effect		Much closer t	to him/her	
O	0 0	O	0 0	O		
2a) In the past week, how	often (INSERT	BEHAVIOR 2 H	IERE)?			
b) Our conversation	ns about this beh	avior (or lack of	behavior) mad	de the behavior:		
Much worse		No effect		Muc	h better	
O	0 0	O	0 0	O		
c) This behavior, or	r conversations a	about this behavior	or, made me fe	eel:		
Much more distant		No effect		Much closer t	to him/her	
O	0 0	O	0 0	O		
3a) In the past week, how	often (INSERT	BEHAVIOR 3 H	IERE)?			
b) Our conversation	ns about this beh	avior (or lack of	behavior) mad	de the behavior:		
Much worse		No effect		Muc	h better	
O	0 0	O	0 0	O		
c) This behavior, or	r conversations a	about this behavior	or, made me fe	eel:		
Much more distant		No effect		Much closer to	o him/her	
0	0 0	0	0 0	0		

### APPENDIX E

### RESPONSES TO CONFLICT

We would like to know if you and your partner engage in any of the following behaviors when having trouble reaching a solution to some conflict or problem. Please indicate by filling in a circle on the scale how often, if ever, the following behaviors occur in the process of dealing with the problem.

#### YOUR BEHAVIOR

	Never		25% of the time		50% of the time		75% of the time		Always
Hit, bite, scratch	0	0	0	0	0	0	0	0	0
Yell or scream	0	0	0	0	0	0	0	0	0
Swear	0	0	0	0	0	0	0	0	0
Nag	0	0	0	0	0	0	0	0	0
Complain	0	0	0	0	0	0	0	0	0
Be sarcastic (Put-downs)	0	0	0	0	0	0	0	0	0
Criticize	0	0	0	0	0	0	0	0	0
Sulk (pout)	0	0	0	0	0	0	0	0	0
Ignore (silent treatment)	0	0	0	0	0	0	0	0	0
Refuse to talk about it	0	0	0	0	0	0	0	0	0
Leave the scene	0	0	0	0	0	0	0	0	0
Cry	0	0	0	0	0	0	0	0	0
Focus on solving problem	0	0	0	0	0	0	0	0	0
Discuss differences constructively	0	0	0	0	0	0	0	0	0
Find alternatives	0	0	0	0	0	0	0	0	0
Negotiate and compromise	0	0	0	0	0	0	0	0	Ο

### YOUR PARTNER'S BEHAVIOR

	Never		25% of the time		50% of the time		75% of the time		Always
Hit, bite, scratch	0	0	0	0	0	0	0	0	0
Yelling or screaming	0	0	0	0	0	0	0	0	0
Swearing	0	0	0	0	0	0	0	0	0
Nagging	0	0	0	0	0	0	0	0	0
Complaining	0	0	0	0	0	0	0	0	0
Sarcasm (Put-downs)	0	0	0	0	0	0	0	0	0
Criticizing	0	0	0	0	0	0	0	0	0
Sulking (pouting)	Ο	0	0	0	0	0	0	0	Ο
Ignoring (silent treatment)	0	0	0	0	0	0	0	0	0
Refuse to talk about it	0	0	0	0	0	0	0	0	0
Leave the scene	0	0	0	0	0	0	0	0	0
Crying	0	0	0	0	0	0	0	0	0
Focuses on solving problem	0	0	0	0	0	0	0	0	0
Discusses differences constructively	0	0	0	0	0	0	0	0	0
Finds alternatives	0	0	0	0	0	0	0	0	0
Negotiates and compromises	0	0	0	0	0	0	0	0	0

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