ABSTRACT

Title of Thesis: THE IMPACT OF COUPLE THERAPY FOR ABUSIVE BEHAVIOR ON PARTNERS' NEGATIVE ATTRIBUTIONS ABOUT EACH OTHER, RELATIONSHIP SATISFACTION, COMMUNICATION BEHAVIOR, AND PSYCHOLOGICAL ABUSE

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Treatments for abusive behavior commonly include cognitive restructuring to modify negative attributions. Little is known about the extent to which interventions modify attributions, and whether cognitive changes are associated with behavioral and relationship satisfaction change. This study investigated the degrees to which cognitive-behavioral couple therapy (CBCT) and a usual treatment (UT) result in therapeutic changes in couples experiencing psychological and/or mild to moderate levels of physical abuse. A sample of community couples seeking assistance for relationship problems at a university-based clinic were randomly assigned to CBCT or UT. Twenty-four couples in CBCT and 26 couples in UT completed 10 weekly 90-minute sessions. This study involved analyses of pre- and post-therapy measures of psychological abuse, relationship satisfaction, communication, and negative attributions. Findings indicated that both conditions decreased psychological abuse and negative attributions, and increased relationship satisfaction. CBCT decreased negative communication. Couples therapy is an effective treatment modality for this specialized population.

THE IMPACT OF COUPLE THERAPY FOR ABUSIVE BEHAVIOR ON PARTNERS' NEGATIVE ATTRIBUTIONS ABOUT EACH OTHER, RELATIONSHIP SATISFACTION, COMMUNICATION BEHAVIOR, AND PSYCHOLOGICAL ABUSE

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CHAPTER 1

Introduction

Statement of the Problem

Prior research has linked faulty cognitive processing, specifically partners' negative attributions about each other's motives and personal characteristics, with behaviors in couple interactions (Miller & Bradbury, 1995) and subjective accounts of relationship satisfaction (Bradbury, Fincham, & Beach, 2000; Fincham & Bradbury, 1987; Fincham, Harold, & Gano-Phillips, 2000). In addition, research has implicated negative attributions as a risk factor for intimate partner violence. For instance, violent male partners maintain hostile attributions regarding their female partner's negative behaviors to justify their aggression (Holtzworth-Munroe, Meehan, Rehman, & Marshall, 2002). Therefore, interventions developed to treat distressed couples or to prevent and decrease abusive behavior within couples commonly include a cognitive-behavioral component targeting the modification of negative attributions, including the blaming of one's partner for relationship problems (Baucom, Epstein, Rankin, & Burnett, 1996; Dattilio, 2005; Holtzworth-Munroe et al., 2002; LaTaillade, Epstein, & Werlinich, 2006; Murphy & Eckhardt, 2005). In light of prior research, treatment that successfully targets and modifies faulty attributions to self, partner, and the relationship would be expected to increase relationship satisfaction, increase the use of positive communication behavior, decrease the use of negative communication behavior, and prevent intimate partner violence and psychological aggression among couples identified as experiencing mild to moderate levels of intimate partner violence. However, little is known about the extent to which interventions targeting cognitive restructuring in conjoint therapy modify negative

attributions, and whether cognitive changes are related to improvements in relationship satisfaction, improvements in communication behaviors, and decreases in intimate partner violence.

Purpose

The current study was intended to clarify the degree to which conjoint treatment for intimate partner violence modified participating partners' negative attributions about one another, as well as decreased partners' abusive behavior, improved their communication behaviors, and increased their relationship satisfaction. More specifically, the current study involved a comparison between structured cognitive-behavioral couple therapy (CBCT) and usual conjoint treatment from a variety of systems theoretical orientations (UT), both of which were designed to target the reduction of risk factors for psychological and physical abuse. The current study investigated the degree to which the CBCT and UT conditions decreased negative attributions of partners in distressed couples seeking help at a university-based clinic and reporting psychological and/or mild to moderate physical abuse prior to treatment. Another purpose of the current study was to examine the degrees to which changes in attributions were associated with changes in relationship satisfaction, communication behavior, and reported psychological abuse. The results of this study help fill in a gap in the literature pertaining to the effectiveness of structured, theoretically-based interventions, specifically comparing effects of conjoint cognitive-behavioral interventions and conjoint interventions based on a variety of family systems orientations.

Literature Review

The literature review for the current study expands on the relationship and possible causal link between attributions and marital satisfaction, serving as the basis for the current study's exploration of the association between the modification of negative attributions and change in satisfaction. Then the review explores attributions in relation to partner interactions and behaviors, such as problem-solving and communication interactions, and it concludes with a summary of research on psychologically aggressive and physically abusive behavioral interactions in intimate relationships. The findings serve as a basis for the targeting of negative attributions in treatment of couples experiencing mild to moderate levels of psychological abuse and/or intimate partner violence. Finally, the literature pertaining to couple therapy provides a basis for the interventions involved in the outcome study from which data for this study were derived.

Attributions and relationship satisfaction. Bradbury, Fincham, and Beach (2000) review the literature on marital satisfaction published in the 1990s, including the influences of interpersonal processes and context on marital satisfaction, and the conceptualization and measurement of marital satisfaction. Important to the current study are findings regarding the role of spousal cognitions, specifically negative attributions, in marital functioning and satisfaction. Causal and responsibility attributions are the two types of attributions referenced in the literature. Causal attributions about relationship problems pertain to inferences that an individual makes regarding the locus of the cause of an event such as an argument (i.e., the extent to which the argument is thought to be caused by the spouse), globality (i.e., the extent to which the cause is thought to affect a variety of domains within the relationship), and stability (i.e., the extent to which the

cause of the problem is viewed as operating consistently over time). Responsibility attributions about relationship problems involve inferences that the problems are due to the partner's blameworthiness, negative intent, and selfish motivation. Baucom, Epstein, Rankin, and Burnett (1996) summarize the consistent findings relating maladaptive attributions with relationship distress; namely that distressed spouses tend to explain negative relationship events as global and stable characteristics of their partners, in addition to viewing the partner's negative behaviors as intentional, selfish, and blameworthy.

Previous studies have attempted to clarify the possible causal relationship between attributions and marital satisfaction. Bradbury and Fincham (1990) reviewed the literature on causal and responsibility attributions in marriage to develop a conceptual link among attributions, marital satisfaction, and behavior in close relationships. The association between attributions that individuals make about the causes of relationship events and their level of marital satisfaction has been supported empirically by several correlational studies (Epstein, Pretzer, & Fleming, 1987; Holtzworth-Munroe & Jacobson, 1985), but these studies have not established a causal link. To address the hypothesized causal relationship between attributions and marital satisfaction, two research approaches have developed -- a longitudinal approach and an experimental approach that includes treatment outcome research (Bradbury & Fincham, 1990).

Three studies have approached the attribution-marital satisfaction causal association with a longitudinal design. Fincham and Bradbury (1987) examined the utility of causal and responsibility attributions in predicting marital satisfaction approximately 12 months later for 34 married couples recruited by newspaper advertisements asking for

married couples to participate in a study about marriage (n = 31) and referrals from marital counselors (n = 8). Attributions for hypothetical and real marital problems and partner behaviors were measured by a shortened version of the *Marital Attribution Style Questionnaire* (Fincham, Beach, & Nelson, 1987) that asks respondents for attributions regarding hypothetical actions by their partner, with the addition of two actual difficulties identified by the participants as relevant to their relationship. Participants indicated what they considered the major cause of the event. Causal attributions were further assessed as participants were asked to rate the locus of the cause (i.e., the extent to which the event was caused by the spouse), the globality of the cause (i.e., the extent to which the cause affected other areas of the relationship), and the stability of the cause (i.e., the extent to which the event would occur again in the future given the presence of the identified cause). Responsibility attributions were assessed by asking participants to rate the degree of blame deserved by the spouse and the extent to which the spouse's behavior was intentional and reflected selfish motivation. The *Marital Adjustment Test* (Locke & Wallace, 1959) was used to measure relationship satisfaction, and the *Relationship Beliefs Inventory* (Eidelson & Epstein, 1982) assessed unrealistic beliefs about marriage. Couples completed the first battery of assessments upon recruitment and completed the second battery of assessments approximately 12 months later. All the same questionnaires were administered, except the *Relationship Beliefs Inventory* was administered only at the first assessment. Results supported the correlational relationship between attributions and marital satisfaction, because both causal and responsibility attributions were significantly related to marital satisfaction at each assessment time. Causal and responsibility attributions were equally related to marital satisfaction,

suggesting that both types of attributions are important to the attribution-marital satisfaction link. When exploring the causal link between attributions and marital satisfaction, Fincham and Bradbury (1987) found that wives' attributions predicted their later marital satisfaction, but husbands' attributions did not significantly predict their later marital satisfaction. Marital satisfaction did not predict later attributions, offering support for the temporal sequence of marital satisfaction being caused by maladaptive attributions. Although the significant results only pertained to wives, this study marked the first to provide preliminary empirical evidence for the causal relationship between attributions and marital satisfaction.

Fincham and Bradbury (1993) assessed the longitudinal association between causal attributions and marital satisfaction in an effort to inform therapeutic treatments that were oriented toward modifying attributions. Due to the question raised in the literature regarding the correlational versus causal relationship between attributions and marital satisfaction, the authors aimed to explore the nature of the link between attributions and marital satisfaction. Additionally, the longitudinal relation between depression and marital satisfaction was examined due to prior research suggesting that depression is a correlate of marital satisfaction. Married couples were recruited through newspaper advertisements, and 106 couples completed both phases of the study; the first assessment phase upon recruitment and the second assessment phase 12 months after the first assessment. The *Marital Adjustment Test* (MAT; Locke & Wallace, 1959) was used to measure marital satisfaction, the *Beck Depression Inventory* (BDI; Beck & Beamesderfer, 1959) to measure depressive symptoms, and the *Rosenberg Self-Esteem Scale* (Rosenberg, 1965) to measure self-esteem as reported by each member of the

couple individually. To assess attributions about negative relationship events, Fincham and Bradbury used participants' self-reported attributions on attributional dimensions, as well as composite scores regarding participants' attributions about four common negative partner behaviors (e.g., "Your wife/husband criticizes something you say," "Your wife/husband begins to spend less time with you," "Your wife/husband does not pay attention to what you are saying," and "Your wife/husband is cool and distant"). Participants were asked to rate agreement with attribution statements representing causal (i.e., the extent to which the cause of the event is attributed to the partner or self), stable (i.e., the extent to which the cause was likely to change), and global (i.e., the extent to which the cause affected other parts of the relationship) dimensions. Although all three predictors (depression, self-esteem, and attributions) accounted for a significant portion of the variance in marital satisfaction in the first phase of the study, the attribution dimensions were found to account for a significant unique portion of the variance in marital satisfaction. Therefore, the link between attributions and marital satisfaction is not dependent on the individual's levels of depression and self-esteem at one point in time. Husband and wife attributions predicted *later* marital satisfaction, suggesting a causal association between attributions and marital satisfaction. However, husbands' marital satisfaction also was found to predict later attributions, suggesting a possible bidirectional influence between attributions and marital satisfaction for husbands. Although the results suggest a possible causal relation between causal attributions and marital satisfaction, further research that includes the manipulation of each variable is needed to demonstrate actual causal associations.

Fincham, Harold, and Gano-Phillips (2000) tested the causal link between

attributions and marital satisfaction further by longitudinally exploring links between attributions and marital satisfaction in recently married couples at two points in time. Additionally, the study aimed to expand the literature by exploring possible mediators of the attribution-satisfaction link, such as spouse expectancies for effective conflict resolution. One hundred fifty couples were identified by newspaper marriage announcements and marriage license records, and 98 couples completed the three phases of the study. At phase one, causal and responsibility attributions were assessed by presenting respondents with common negative partner behaviors and asking them to rate their agreement along six causal (causal locus, stability, and globality) and responsibility (intention, selfish motivation, and blame) attribution dimensions using the *Relationship Attribution Measure* (RAM; Fincham & Bradbury, 1992). Marital satisfaction was assessed with the *Quality Marriage Index* (QMI; Norton, 1983). At phase two, approximately six months later, respondents completed an efficacy expectancies measure. Each partner was asked to rate the extent of agreement with statements pertaining to whether or not he or she had the ability to resolve conflicts with his or her partner. At phase three, approximately 18 months after phase one, the couples completed the attribution and marital satisfaction measures again. Consistent with prior studies, negative attributions for negative partner behavior were related to lower levels of marital satisfaction for wives and husbands. When considered together, earlier causal and responsibility attributions were related to later marital satisfaction, offering additional evidence that attributions influence marital satisfaction. However, when considered separately, later causal attributions were influenced by earlier marital satisfaction as well. Findings were not significant for responsibility attributions. These findings offer support

for the reciprocal influences between causal attributions and marital satisfaction, in addition to conceptually distinguishing between causal and responsibility attributions. Efficacy expectancies were found to mediate the relationship between causal attributions and marital satisfaction; therefore the contribution of other cognitions should be assessed when targeting the attribution-marital satisfaction link.

The empirical literature strives to clarify the association between attributions and relationship satisfaction in an effort to provide support for therapeutic interventions aiming to increase relationship satisfaction by targeting maladaptive attributions. Treatments targeting cognitive restructuring, specifically the modification of maladaptive attributions, are based on an assumption that there is a causal link between attributions and marital satisfaction. Therefore, it is expected that if partners' negative attributions are reduced during marital therapy, treatment will effectively increase marital satisfaction. However, past randomized clinical trials provided mixed results. Margolin and Weiss (1978) randomly assigned distressed couples to a nonspecific treatment control group or one of two treatment conditions. One condition modified communication skills and the other condition used cognitive restructuring interventions in addition to modifying communication skills. Each couple completed a two-hour treatment session with a pre- and post-treatment assessment. Results indicated that couples in all groups decreased their use of negative communication skills and reports of negative daily events; however, couples in the cognitive restructuring group reported higher marital satisfaction compared to the control and communication skills only groups. Although the results suggest that changes in attributions may contribute to increased marital satisfaction, the study failed to measure attributions directly. In contrast, the current study will directly measure negative

attributions and marital satisfaction pre- and post-treatment to clarify the association between attributions and marital satisfaction, and support the use of cognitive restructuring techniques.

In another outcome study, Baucom, Sayers, and Sher (1990) studied the effectiveness of behavioral marital therapy (BMT) with the addition of cognitive restructuring (CR) and/or emotional expressive training (EET) for 60 maritally distressed couples. Couples were randomly assigned to one of four conditions involving 12 therapy sessions: BMT, BMT + CR, BMT + EET, BMT + CR + EET, with the total number of treatment sessions held constant (e.g., adding sessions of CR meant reducing sessions of BMT). The cognitive restructuring intervention involved several sessions dedicated to modifying maladaptive attributions and addressing unrealistic standards. The overall findings indicated that the various treatment combinations resulted in similar improvements in marital satisfaction as assessed by changes on the *Dyadic Adjustment Scale* (DAS; Spanier, 1976). Although not statistically significant, the BMT alone condition tended to result in more spouses emerging from the distressed into the non-distressed range on the DAS. The authors explained their findings by postulating that random assignment to treatment groups may result in equally effective treatments because the treatment types have not been matched with the specific concerns of the couple. It appears that cognitive and behavioral interventions in the study had comparable effects. One limitation of the study was the inability to determine whether the CR actually modified partners' attributions, because attributions were not assessed directly.

The current study was intended to provide clarity to the mixed findings from prior outcome studies of treatments with a cognitive restructuring component by assessing

attributions and marital satisfaction at pre- and post-treatment. It aimed to clarify the relationship of changes in causal attributions with those in marital satisfaction and partners' negative behavior toward each other. Additionally, the study explored couple therapy, specifically cognitive-behavioral therapy and various other marital therapies based on a systems perspective, as a treatment modality for distressed couples who have experienced psychological and/or mild to moderate physical abuse.

Attributions and communication behavior. The theoretical link between cognitions and behaviors lays the foundation for research to study the association between causal and responsibility attributions and partner behaviors. The literature exploring the link between an individual's attributions for relationship difficulties and the way that the individual behaves toward his or her partner has primarily examined that link in situations in which members of couples were engaged in problem-solving discussions (Bradbury, Beach, Fincham, & Nelson, 1996; Bradbury & Fincham, 1992; Miller & Bradbury, 1995), and social support discussions (Miller & Bradbury, 1995). The research literature has more recently expanded to include attributions associated with psychologically aggressive and physically violent behaviors between intimate partners (Holtzworth-Munroe & Hutchinson, 1993; Tonizzo, Howells, Day, Reidpath, & Froyland, 2000).

Bradbury and Fincham (1992) explored the link between attributions and behaviors by considering several methodological issues when designing their study. They included observational behavior data instead of relying on self-reports of behavior, measured both causal and responsibility attributions, maximized the generalizablity of their findings by utilizing a sample of couples representing the full range of marital

satisfaction versus distress, and controlled for the effect of marital satisfaction on the attribution-behavior link. Couples were recruited through media advertisements inviting "couples from all walks of life" to participate in a study about marriage and were selected to participate based on reports of marital satisfaction to ensure a range of distressed and non-distressed couples in the sample. Forty-seven couples completed the *Marital Adjustment Test* (MAT; Locke & Wallace, 1959) to assess marital satisfaction and the *Inventory of Marital Problems* (Geiss & O'Leary, 1981) to determine which common relationship problems each couple experienced. Spouses were asked to rate the degrees to which they made causal (i.e., locus, globality, and stability) and responsibility (i.e., blame, intent, and motivation) attributions for two issues that presented major difficulties for each couple. Each participant rated attributions on a 7-point continuum representing the extent to which they believed each type of attribution was related to their marital difficulties. Each couple also completed a 15-minute video-taped problem-solving discussion in which they were asked to work on resolving the difficulty that they agreed was most problematic in their relationship. Bradbury and Fincham (1992) devised a coding scheme to code the observational data. Both husbands' and wives' behaviors were independently coded along five dimensions (i.e., denial versus acknowledgement of own contribution to the problem, an unconstructive focus on past versus a constructive focus on the present and future, solutions abandoned versus pursued, a non-negotiated versus negotiated approach to solving problem, and failure to consider versus consideration of the spouse's concerns and views). The results from Study 1 provided support for the hypothesized association between maladaptive attributions and less-effective problem-solving behavior, particularly for wives' responsibility attributions. Marital satisfaction

moderated the relationship between responsibility attributions and problem-solving behaviors of wives, such that responsibility attributions maintained by distressed wives were more strongly related to behaviors compared to those of non-distressed wives. The authors suggested that insignificant findings pertaining to the relations between behavior and causal attributions for wives, and causal and responsibility attributions for husbands, may be due to the global assessment of behaviors in the study. Because attributions affect individuals' specific, in-the-moment responses, perhaps a finer level of analysis of the behaviors in the problem-solving interactions would reveal significant associations.

Bradbury and Fincham (1992) conducted their Study 2 in an effort to code couples' behavioral interactions based on speaking turn as the unit of coding, in order to provide a finer analysis of behaviors during the problem-solving discussion. Study 2 aimed to explore the association between causal and responsibility attributions for marital problems and avoidant, positive, and negative behaviors in problem-solving discussions. Forty married couples were recruited by newspaper advertisements similar to those in Study 1 (n = 29) and from a clinic for couples seeking marital therapy (n = 11). The procedures and measures remained the same as in Study 1, but the behavioral coding scheme was modified. A behavioral code based on three summary codes devised from the Verbal Tactics Coding Scheme (Sillars, 1981) was assigned to each partner at each change in speaking turn. The summary codes included avoidant (i.e., denial, change in topic away from problem), negative (i.e., hostility, rejection of partner's views), and positive (i.e., empathy, neutral or positive information about problem) behavior. For wives, higher levels of maladaptive causal and responsibility attributions were associated with lower marital satisfaction. For husbands, only higher levels of maladaptive

responsibility attributions co-varied with lower marital satisfaction. In relation to behavior, when controlling for marital satisfaction, husbands' and wives' maladaptive causal and responsibility attributions were associated with a tendency to exhibit negative behaviors in the problem-solving discussion. Additionally, wives' causal and responsibility attributions were related to exhibiting positive behaviors, such that wives with maladaptive attributions exhibited less positive behavior. Due to the finer analysis of behaviors and the measurement of attributions related to the problematic topic, the results provide support for the relationship between individuals' attributions and their behavioral responses to partner behaviors. For example, distressed wives who maintained maladaptive attributions had a greater tendency to reciprocate their husbands' negative behavior. Wives maintaining maladaptive responsibility attributions tended not to reciprocate husbands' positive behaviors. Limitations to Study 1 and Study 2 are related to the possible influence of unmeasured variables and an inability to infer causal direction from the correlational data. The measurement of attributions may be problematic because they relate to a specific marital difficulty, followed by a problem-solving discussion focused on this specific difficulty. The methodology may affect the results by inflating attributions maintained by spouses and by priming the behaviors during the couple's discussion, thereby strengthening their association with attributions.

To build and improve upon Bradbury and Fincham's (1992) study, Miller and Bradbury (1995) examined the link between attributions and newlywed couples' behaviors in both problem-solving discussions and social support discussions. Sixty couples married less than six months were recruited by newspaper advertisements. Couples were asked to make attributions for standard marital events instead of the

problem discussed in the couple's taped communication samples. To assess behaviors, the couples were asked to engage in a 15-minute communication sample, attempting to come to a solution to a marital problem that both had identified as problematic. After completion of a battery of questionnaires, each couple also participated in a social support task. The task involved two 10-minute segments. In the first segment, one partner was asked to identify a personal difficulty that he or she would like to change and the other partner was asked to offer support. In the second segment, the spouses switched roles. Problem-solving discussions were coded with the Verbal Tactics Coding Scheme (Sillars, 1981). Each 5-second interval was assigned one of seven behavioral codes, which were later reduced to three summary codes: avoidant (overt denial, changing the subject), negative (rejection of partner's views or criticism of the partner), or integrative (enhancing the discussion of the problem through empathy). Social support discussions were coded with the Social Support Interaction Coding System (Bradbury & Pasch, 1993). The behavior of the spouse providing support was coded for each speaking turn with one of four codes: neutral (description without offering suggestion of solution), off-task (conversation unrelated to the spouse's personal difficulty), positive (attempts to help resolve the spouse's personal difficulty), or negative (blaming or criticizing the spouse's personal difficulty, expressing negative affect). Additionally, the behavior of spouses as they discussed their personal difficulty was coded as negative (denial of problem, criticism of partner's support), positive (attempts to resolve personal difficulty), off-task (same as for helper), and neutral (same as for helper). The *Marital Adjustment Test* (Locke & Wallace, 1959) was used to measure marital satisfaction and the *Relationship Attribution Measure* (Fincham & Bradbury, 1992) to measure causal and

responsibility attributions.

Miller and Bradbury (1995) replicated prior findings relating lower marital satisfaction with negative responsibility and causal attributions for husbands and wives, even though the marital satisfaction of the newlywed sample indicated that overall they were very satisfied. In the problem-solving discussion, wives' negative responsibility attributions were related to higher proportions of negative behaviors, lower proportions of integrative behavior, and a tendency to engage in negative behaviors in response to husband negative behavior. Wives' causal attributions were unrelated to their problem-solving behavior, and husbands' attributions were unrelated to their problem-solving behavior. In the social support discussion, wives' negative responsibility attributions were related to higher proportions of negative behavior and lower proportions of neutral behavior. Additionally, for wives, negative causal attributions co-varied with a tendency to engage in negative behaviors in response to husband negative behavior. For husbands, the tendency to respond negatively to wives' neutral behavior was related to negative causal attributions. The results suggest and build upon prior findings indicating the association between attributions and behavior is stronger for wives than husbands. The results also suggest that the association between attributions and behavior is stronger among distressed couples than among non-distressed couples. Although the study improved on methodological and conceptual concerns from past studies, the cross-sectional design did not permit causal inferences about the link between attributions and behavior. Another limitation is the possible ordering effect related to the two contexts for behavioral observation; perhaps the interaction in the problem-solving discussion affected the interaction in the social support discussion.

Bradbury, Beach, Fincham, and Nelson (1996) assessed attributions and behavior in functional and dysfunctional marriages, with the additional aim of studying the role of depression in the attribution-behavior link. Theoretically based in the cognitive-behavioral model, their study was based on the assumption that individuals who attribute more responsibility for marital problems to their partner are less likely to behave positively to resolve these problems, instead engaging in unproductive behaviors during problem resolution. The 52 married couples were recruited through newspaper advertisements. The couples were divided into three groups based on scores on the *Dyadic Adjustment Scale* (Spanier, 1976) for relationship satisfaction versus distress and the *Beck Depression Inventory* and the *Structured Clinical Interview for the* DSM-III-*Patient Version* for depression. The three groups were 1) non-distressed, non-depressed group (ND; n = 19), 2) distressed, non-depressed group (DO; n = 13), and 3) distressed, depressed group (DD; n = 20). The *Marital Attribution Style Questionnaire* (MASQ) was used to assess responsibility attributions by asking participants to indicate the extent to which partner intent, blame, and selfish motivation factored into three positive and three negative hypothetical partner behaviors. After they completed the attribution measure, couples were asked to discuss a marital issue that they agreed was problematic for them and to work toward a resolution for 10 minutes while the conversation was audiotaped. Problem-solving discussions were coded using the Kategoriensystem für Partnerschaftliche Interaktion (KPI; Hahlweg et al., 1984), assigning each unit of speech one of three nonverbal codes (positive, negative, or neutral), and one of 12 verbal codes. The verbal codes were cataloged into five categories (direct expression, acceptance-agreement, neutral information, criticism, and refusal). Based on the preliminary analysis,

depression did not influence the attribution-behavior association. When controlling for type of distress/depression group, wives with maladaptive attributions engaged in less positive and more negative behaviors. Husbands' attributions were unrelated to their behavior.

Whereas other studies have assessed the correlational relationship between attributions and behavior, Sanford (2006) explored a causal link by examining appraisals, such as attributions and expectancies, as antecedents of behavior between partners in 77 newlywed couples. The purpose of the study was to explore how *within-person* changes in appraisals predicted changes in the individual's own communication behaviors. Couples were recruited through marriage license records and newspaper advertisements indicating that newly married couples could earn $60 for participation in a research study. All couples participated in two assessment sessions held approximately two weeks apart. At the first assessment, partners individually wrote a description of an unresolved issue in their relationship, completed questionnaires, and then came together as a couple to complete a 10-minute videotaped conversation about the wife's incident. The partners were separated again to complete the pre-conversation questionnaires for the husband's incident, then returned to complete a 10-minute videotaped conversation about the husband's incident. The second assessment followed the same protocol, except the husband's incident was discussed first followed by the wife's incident, and both members of the couple completed the *Quality Marital Index* (Norton, 1983) as a measure of relationship satisfaction. The *Relationship Attribution Measure* (RAM; Fincham & Bradbury, 1992) was adapted to measure event-dependent attributions, such that the couples rated actual relationship events as opposed to hypothetical events.

Communication behaviors were coded using the Rapid Couples Interaction Scoring System (Gottman, 1996). For each minute, the behavior of each spouse was coded as negative or positive, and for level of strength: none, mild, or strong. Communication behaviors were also coded for degree of each person's manifest understanding of the partner's feelings, thoughts, desires, and motives. The findings indicated that in addition to expectancies and attributions correlating with communication behavior, the cognitions also predicted within-person variance in behavior. Specifically, maladaptive attributions significantly predicted higher levels of negative communication, lower levels of positive communication, and less understanding of the partner during problem-solving discussions for wives and husbands.

In general, the literature on causal and responsibility attributions and observed behaviors suggests that the link between attributions and behavior may be stronger for women than men, although Sanford (2006) did not find a gender difference. The literature also suggests exploring both causal and responsibility attributions as they may be related differentially to behavior. Generally, spouses maintaining negative attributions about their partners exhibit more negative behaviors and less positive behaviors. However, these findings are limited to the context of problem-solving discussions, and to the collection of observational data. Based on the methodologies used in past research, the current study utilizes the observational approach to study the relationship between the modification of negative attributions and changes in communication behaviors in problem-solving discussions.

Attributions, psychological aggression, and intimate partner violence. The theoretical and empirical link between attributions and behavior between intimate

partners may extend beyond communication about marital problems to partners' psychological aggression or physical violence during marital conflict. The use of psychological aggression and intimate partner violence are maladaptive and harmful conflict resolution tactics; therefore, research has explored the relationship between abusive interactions and dysfunctional attributions maintained by perpetrators and victims. Most research has focused on differences between violent and non-violent male perpetrators, despite the potential for women to engage in aggressive tactics as well. Additionally, the literature has largely ignored the relationship between attributions and psychological abuse, focusing mostly on physical intimate partner violence. Because psychological aggression often leads to the escalation of physical violence (Murphy & O'Leary, 1989), an understanding of the role of attributions in physical abuse may provide a foundation for understanding the role of attributions in psychological abuse.

From a social information-processing model of marital violence, Holtzworth-Munroe and Hutchinson (1993) examined the responsibility attributions maintained by violent husbands for nonviolent wife behavior compared to the attributions of nonviolent men in distressed and non-distressed relationships. Attributions of responsibility were measured using the composite score of two measures. One measure of negative attributions, the *Responsibility Attribution Questionnaire* (RAQ; Fincham & Bradbury, 1992), asked participants to rate the degree to which their wife acted with negative intent, had acted with selfish motivation, and should be blamed for her actions. The other measure, the *Negative Intentions Questionnaire* (NIQ) was developed specifically by Holtzworth-Munroe and Hutchinson to assess the degree to which men viewed their wives as having negative intentions. In response to written scenarios that couples

commonly experience, participants rated on a continuum of agreement whether the wife acted with negative intent. Men were categorized as relationally violent or nonviolent by their scores on the *Conflict Tactics Scale* (CTS; Straus, 1979). The *Short Marital Adjustment Test* (SMAT; Locke & Wallace, 1959) was used to measure marital adjustment and to categorize nonviolent men as distressed or non-distressed. The violent men were recruited by therapists after completing the CTS, and the nonviolent men were recruited through newspaper advertisements asking for "married men for a research study," later to be divided into distressed or non-distressed groups based on scores on the SMAT. Results of the study indicated that violent men were significantly more likely to attribute negative intentions and selfish motivation to their wives and to see the wives' behavior as blameworthy, compared to nonviolent men. The findings offer support for the hypothesized link between aggressive behavior and negative attributions of responsibility. Situations involving jealousy, rejection by wife, and potential public embarrassment elicited more attributions of wife's negative intent from violent husbands. Additionally, violent men were more likely than both distressed and non-distressed non-violent men to attribute negative attributions to their partner, whereas distressed and non-distressed non-violent men did not differ from one another in their use of negative attributions about their partner. The results are inconsistent with previous studies that indicate distressed men make more negative attributions compared to non-distressed men. However, Holtzworth-Munroe and Hutchinson attribute the discrepancy to this being the first study to compare attributions of distressed and non-distressed husbands in the confirmed absence of marital violence. Their findings indicate that future studies should systematically assess marital distress, marital violence, and attributions, and the present

study is designed to do so.

To extend previous findings, Tonizzo, Howels, Day, Reidpath, and Froyland (2000) evaluated six dimensions of responsibility and causal attributions (locus, stability, globality, intentionality, selfish motivation, and blame) in a comparison of physically violent men (n = 19), non-physically violent men in counseling (n = 22), and non-physically violent men in the community (n = 31). Men were divided into categories based upon recruitment and their use of violence as determined by the *Conflict Tactics Scale* (Strauss, 1979). Participants completed the *Relationship Attribution Measure* (Fincham & Bradbury, 1992) by answering six questions representing the attribution dimensions for eight hypothetical negative partner behaviors. Marital distress was assessed utilizing a single Likert-type scale ranging from dissatisfied to very satisfied. No difference was found between the non-physically violent community and counseling groups. Physically violent men attributed less stability, more intent, more selfish motivation, and more blame to wives' negative behavior compared to the counseling group. Violent men differed from non-violent community men on all attribution dimensions, except for locus, such that violent men maintained more negative attributions for their partner's behavior.

The literature on physical abuse far outweighs the research exploring psychological abuse, especially in relation to the association between attributions and psychological abuse. However, the literature has established a link between attributions and behavior (problem-solving behaviors and physical abuse), so it seems likely that attributions are related to other types of behavior, including psychologically abusive behaviors. Because psychological aggression predicts physical violence between intimate

partners, perhaps psychologically and/or physically aggressive individuals make similar types of causal and responsibility attributions for their partner's negative behavior. Several studies have found that psychological abuse has an equal if not more severe negative impact on victims of intimate partner violence, including effects on emotional functioning, self-esteem, and psychological adjustment (for a review see O'Leary, 1999). Consequently, the reduction or elimination of psychological abuse is an important treatment goal for couples presenting with verbal and emotional aggression. Additionally, because physical abuse is almost always preceded by psychological abuse, interventions intended to prevent intimate partner violence should target the reduction of psychological abuse (O'Leary, 1999). Therapeutic interventions to reduce and prevent psychological aggression and intimate partner violence should target modification of maladaptive attributions, because such negative cognitions have been found to be a common risk factor for negative behavioral interactions in couples. The current study explored couple therapy, specifically cognitive-behavioral therapy and common forms of systemically-oriented couple therapy, as a treatment modality for the reduction and prevention of psychological and physical abuse by targeting maladaptive attributions as well as aggressive behavior.

Couple therapy for intimate partner violence. The traditional approach to treatment of couples experiencing intimate partner violence has been splitting partners into gender-specific groups, usually separating male perpetrators and female victims. However, many perpetrators participating in these anger management groups continue to engage in abusive interactions with their partners (Murphy & Eckhardt, 2005). Although separation of perpetrators and victims may be necessary to ensure safety in severe cases

of physical abuse, couples experiencing mild to moderate psychological and/or physical abuse may benefit from couple therapy. Conjoint treatment provides the optimal context, when deemed safe, to intervene in couple interactions contributing to the abusive cycle (Holtzworth-Munroe, Meehan, Rehman, & Marshall, 2002). Several theoretical approaches have been reviewed in the literature to treat couples experiencing psychological abuse and/or intimate partner violence, such as cognitive-behavioral couple therapy (Holtzworth-Munroe, Meehan, Rehman, & Marshall, 2002) and emotionally focused couple therapy (Beckerman & Sarracco, 2002). Despite the lack of empirical research, other models of couple therapy, such as structural, strategic, narrative, and Bowen systems approaches, have been applied clinically in cases of intimate partner violence. The current study examined the efficacy of cognitive-behavioral treatment and systemically-oriented treatment as usual in a university-based clinic with couples who have been experiencing psychological and/or mild to moderate physical abuse. In particular, this study examined degrees of change due to therapy in partners' negative attributions about their partners, their relationship satisfaction, their psychologically abusive behavior, and their positive and negative problem-solving communication. The relations between attribution change and changes in behavior and relationship satisfaction were a central focus.

Cognitive-behavioral Theory

Every systems-oriented model of therapy is based on specific theoretical assumptions related to the etiology of the presenting problems, the maintenance of the presenting problems, and the agents of therapeutic change. The tenets of each theoretical model inform therapeutic objectives and interventions utilized when conducting couples

therapy. The present study operates under the assumptions of the cognitive-behavioral theoretical framework.

Cognitive-behavioral theory postulates the interconnectedness of cognitions, behaviors, and emotions, such that a change in one is expected to lead to a change in the other. Interpersonal problems arise as faulty cognitions and dysfunctional behaviors are learned and reinforced through repetitive interactions among the involved individuals. While interacting, each member of a couple is behaving, processing and interpreting the other's behavior, and then reacting to their partner. The explanation or attribution assigned by one partner gives meaning to the other partner's behavior, and it prompts the individual to respond based upon their thoughts, regardless of their accuracy (Epstein & Baucom, 2002).

In the present study, distortions in individuals' cognitions about their partner and relationship, such as negative attributions about causes of the partner's actions, and learned maladaptive behaviors, such as poor communication skills and psychological abuse, are the targets of therapeutic intervention. Modifying faulty cognitions and reinforcing positive interactions between partners leads to change in cognitions and behaviors associated with the problems. To enact cognitive and behavioral change, the cognitive-behavioral therapist utilizes cognitive restructuring interventions and skills training, among other interventions. Due to reciprocity, the relatively balanced exchange of positive and negative behaviors between partners, one partner's cognitive and behavioral change is expected to influence the other's partner's change. Changes in both partners' cognitions and behaviors influences the couple's interactions, theoretically diminishing the presenting problems and contributing to the couple's greater subjective

satisfaction regarding their relationship (Baucom, Epstein, & LaTaillade, 2002; Epstein & Baucom, 2002).

It is important to note that whereas cognitive-behavioral approaches to couple therapy (Epstein & Baucom, 2002) specifically target these types of cognitive and behavioral changes, many other theoretical approaches to couple therapy also address cognition and behavior, albeit often less explicitly. Consequently, it is reasonable to assume that cognitive and behavioral changes elicited in the other approaches to couple therapy also will result in some degrees of cognitive and behavioral change, which can lead to increased relationship satisfaction.

Variables

Independent variable: Treatments. The Couples Abuse Prevention Program (CAPP) is comprised of two treatment conditions that are compared in the current study. One condition is CBCT, designed to specifically target the restructuring of cognitions, as well as a decrease in negative behavior, utilizing manualized techniques from the cognitive-behavioral model of couple therapy (Baucom & Epstein, 1990; Epstein & Baucom, 2002). The other is the usual treatment (UT) condition, designed to change negative behavior with interventions from a variety of systems models of therapy that are routinely applied in the outpatient couple and family therapy clinic where this research has been conducted. For a detailed explanation of the CBCT and UT treatments, refer to the treatment descriptions within the Method section of this thesis. Couples seeking assistance for a variety of relationship problems at the CHF are randomly assigned to a treatment condition of CBCT or UT, and the treatment group functions as the independent variable in this study.

Dependent variable: Negative attributions. Attributions, inferences regarding the determinants of observed events, are a type of cognition influencing couple relationships. Specifically, the current study defines an individual's negative attributions about a partner as his or her potentially distorted negative explanations for relationship events, such as attributing the cause of a relationship problem to one's partner's characteristics and behaviors, the partner's malicious intent, and the partner's lack of love for oneself. Negative attributions about one's partner served as a dependent variable in this study. In addition, change in negative attributions was examined as a possible correlate of changes in relationship satisfaction, communication behavior, and psychological aggression as a function of treatment. Change in negative attributions also was used as a covariate to control for the mediating influence of change in negative attributions on the relationship between type of treatment (CBCT versus UT) and change in the other characteristics of relationship functioning (i.e., relationship satisfaction, amount of positive communication behavior, amount of negative communication behavior, amount of psychologically abusive behavior).

Dependent variable: Relationship satisfaction. Relationship satisfaction involves an individual's thoughts and emotions regarding the degree of personal happiness, fulfillment, closeness, harmony, and affection that he or she experiences in an intimate relationship. Degree of change of relationship satisfaction is a dependent variable examined in this study in relation to couples' participation in therapy.

Dependent variables: Positive and negative communication behavior. Interactions between intimate partners involve positive and negative verbal and non-verbal behaviors conveyed by one partner to the other as the couple communicates. Degrees of change in

positive behavior, such as problem-solving and validation of the partner, and negative behavior, such as withdrawal and complaining, were dependent variables in the current study, examined in relation to couples' participation in therapy.

Dependent variable: Psychologically abusive behavior. Psychologically abusive behavior between intimate partners involves the use of coercive and aversive acts by a partner, without any contact with the other's body, with the intention to threaten or produce emotional harm in the other partner. Degree of change in psychological abuse from pre- to post-therapy was a dependent variable in the current study, examined in relation to couples' participation in therapy.

Hypotheses

Cognitive-behavioral couple therapy (CBCT) specifically focuses on both behavioral change (decreasing the partners' forms of negative communication behavior and increasing positive communication) and developing each partner's ability to identify personal cognitions and modify inappropriate cognitions, including unrealistic negative attributions about the partner (Epstein & Baucom, 2002). Cognitive restructuring interventions are part of CBCT, with the goal of increasing each partner's willingness to accept responsibility for the improvement of the relationship and decreasing each partner's blame of the other. Therefore, individuals' negative attributions about their partners were expected to decrease over the course of CBCT.

Interventions utilized in the systems-oriented couple therapy approaches included in the UT condition (e.g., emotionally focused therapy, narrative therapy, strategic therapy) also were expected to modify partners' negative cognitions, although the other theoretical approaches typically do not use interventions specifically designed to directly

modify attributions. Many interventions were employed to alter perceptions and thought processes concerning relationship problems. For example, narrative therapy alters perceptions of the problem through problem externalization interventions, such that clients begin to view the problem as something separate from the self and partner (Freedman & Combs, 2002). As another example, the reframing interventions in the strategic and structural models are intended to alter the client's frame of reference regarding the relationship problem (Kein & Lappin, 2002). Thus, the therapist may reframe one spouse's nagging and the other spouse's withdrawal as the first partner's unsuccessful attempt to attract attention from the second. As a result of the reframing, the withdrawing partner may adopt a softer frame of reference about the partner's nagging behaviors, such that nagging is now viewed as a cry for attention. Therefore, negative attributions about partners also were expected to decrease for partners completing the UT condition. Although both conditions were expected to decrease negative attributions, the CBCT condition was expected to have a larger effect on modification of negative attributions because cognitive restructuring is theoretically prescribed and directly targeted by the CBCT condition.

Overall, both the CBCT and UT conditions were expected to improve couples' relationship satisfaction. Because a majority of couples seeking couples therapy were experiencing discord and relationship problems, and couples in the project from which data were derived for this study participated in established forms of couple therapy, the self-reported satisfaction of partners prior to couples therapy was expected to be lower than their level of satisfaction after treatment.

One of the factors implicated as a contributor to marital satisfaction is cognitions.

Much of the empirical research examining the relationship between individuals' marital cognitions and marital satisfaction has focused on the role of attributions (Bradbury, Fincham, & Beach, 2000). An association between maladaptive attributions for relationship problems and lower levels of relationship satisfaction has accumulated support (Bradbury & Fincham, 1990; Epstein & Baucom, 2002). In the current study, couple therapy was expected to reduce partners' negative attributions as well as their negative behavior toward each other. Furthermore, the degree of reduction in negative attributions, as well as in negative behavior, was expected to be associated with the degree of increase in partners' relationship satisfaction.

The Couples Abuse Prevention Program (CAPP) that was the source of data for this study specifically targeted the decrease of negative attributions about the partner in the CBCT condition because maintaining these maladaptive cognitions was regarded as a risk factor for physical and psychological abuse. The cognitive-behavioral model of couple therapy includes an assumption that cognitive changes should lead to behavioral changes (Epstein & Baucom, 2002). Research suggests a link between more negative attributions and higher rates of negative couple behaviors, such as negative communication behavior during problem-solving (Bradbury, Beach, Fincham, & Nelson, 1996). As further evidence of the link between partners' cognitions and behavior, Holtzworth-Munroe and Hutchinson (1993) found that violent husbands attributed more negative intent toward their wives compared to distressed and non-distressed nonviolent men. Based on the cognitive-behavioral model and prior research linking attributions and behavior, in the current study the degree to which therapy results in reduction of partners' negative attributions was expected to be associated with the degree to which there were

reductions in psychological abuse and the degrees to which there were increases in positive communication behaviors and decreases in negative communication behavior. In addition, because CBCT focuses on the modification of positive and negative couple behavioral interactions, larger reductions in negative communication behavior, improvements in positive communication behavior, and larger reductions in abusive behavior were expected in the CBCT condition compared to the UT condition.

The hypotheses of the current study, tested utilizing the study design represented in Figure 1, were:

1. Negative attributions about partners will decrease in members of couples completing CBCT and UT.
2. CBCT will have a larger effect than UT on the modification of negative attributions.
3. Relationship satisfaction will increase in couples completing CBCT and UT.
4. Negative communication will decrease in couples completing CBCT and UT.
5. Positive communication will increase in couples completing CBCT and UT.
6. CBCT will have a larger effect than UT on the decrease of negative communication behavior.
7. If CBCT has a larger effect than UT on the decrease of negative communication, then the difference is mediated by the change in negative attributions.
8. CBCT will have a larger effect that UT on the increase of positive communication behavior.
9. If CBCT has a larger effect than UT on the increase of positive communication, then the difference is mediated by the change in negative attributions.

10. Psychological abuse as reported by the partner will decrease in couples completing CBCT and UT.
11. CBCT will have a larger effect than UT on the decrease of psychological abuse.
12. If CBCT has a larger effect than UT on the decrease of psychological abuse, then the difference is mediated by the change in negative attributions.
13. Decrease in negative attributions will be associated with improved relationship satisfaction for couples completing CBCT and UT.
14. Decrease in negative attributions will be associated with decreased negative communication for couples completing CBCT and UT.
15. Decrease in negative attributions will be associated with increased positive communication for couples completing CBCT and UT.
16. Decrease in negative attributions will be associated with decreased psychological abuse for couples completing CBCT and UT.

Figure 1: Study Design

Intake	Treatment Condition	Pre-Treatment Assessment	Treatment	Post-Treatment Assessment
Random Assignment to Treatment Condition	Cognitive-Behavioral Couple Therapy (CBCT)	• Inclusion in CAPP determined • Informed consent elicited • Couples complete Demographics Form, MAS, DAS, MMEA, and Communication Sample	10 weekly, 90-minute sessions following the Cognitive-Behavioral Couple Therapy (CBCT) protocol	• Couples complete MAS, DAS, MMEA, and Communication Sample
	Usual Treatment (UT)	• Inclusion in CAPP determined • Informed consent elicited • Couples complete Demographics Form, MAS, DAS, MMEA, and Communication Sample	10 weekly, 90-minute sessions following Usual Treatment (UT)	• Couples complete MAS, DAS, MMEA, and Communication Sample

CHAPTER 2

Method

Sample

The study used data collected previously from couples seeking assistance for a variety of relationship problems at the Center for Healthy Families (CHF), an outpatient couple and family therapy clinic at the University of Maryland, College Park. All couples who sought treatment at the CHF were routinely screened for psychological and physical forms of intimate partner violence. Beginning with the initial telephone intake interview, the caller was briefly asked about concerns related to substance use, abuse, and court-order status. Couples experiencing severe forms of intimate partner violence were never seen conjointly and may have been referred to agencies with appropriate resources, such as emergency shelters. Couples who were court-ordered to therapy initially completed individual sessions, and may have complete conjoint treatment once safety was established. However, these couples were excluded from participation in the CAPP project. Couples who were not screened out of CAPP based on the intake procedure were scheduled for an in-person assessment session with two therapists. During the assessment partners were briefly interviewed together about their presenting problems. Most of the assessment session consisted of the couple completing a battery of questionnaires. Additionally, each member of the couple was interviewed separately about their own and their partner's use of substances, past and current substance abuse treatment, and problems related to substance use. Each member was also asked about past or current incidents of violence, and personal feelings of safety related to living with the partner or

participating in conjoint treatment with the partner. Extensive assessment prior to inclusion in the program determined whether it was safe for the partners to engage in conjoint treatment, and thus whether they were eligible to participate in CAPP.

Eligibility was based upon the self-report questionnaires and the individual interviews. To be eligible to participate, the inclusion criteria were: 1) both partners were a minimum of 18 years old; 2) the couple reported mild to moderate physical abuse which did not result in injury during the past four months based on responses on the *Revised Conflict Tactics Scale* (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) and/or psychological aggression based on responses on the *Multidimensional Measure of Emotional Abuse* (MMEA; Murphy & Hoover, 2001); 3) both partners desired to improve their relationship; 4) the partners spent time with one another at least once a week; and 5) the couple was not receiving concurrent couple treatment. The exclusion criteria were that 1) the couple reported abuse in the past four months resulting in the physical injury of one or both partners that resulted in or should have resulted in medical treatment, or involved the use of a weapon; 2) either partner had an untreated substance or alcohol problem based on the substance abuse interview; or 3) either member of the couple feared living with and/or participating in couple therapy with their partner.

Couples meeting the criteria for inclusion were informed of their eligibility to participate in the CAPP program. Couples were told about the general purposes and format of CAPP, including random assignment to one of two treatment conditions, and incentives to participate and remain in treatment. Couples had the opportunity to ask questions and determine their status as participants in the CAPP program by signing an

informed consent form.

The sample consisted of 24 couples in the CBCT condition (24 females and 24 males) and 26 couples in the UT condition (26 females and 26 males). Of the 24 couples in the CBCT condition, the mean age for women was 30.29 years (*SD* = 7.54) and the mean age for men was 31.92 years (*SD* = 6.63). Of the 26 couples in the UT condition, the mean age for women was 33.23 (*SD* = 8.07) and the mean age for men was 34.96 (*SD* = 4.95). Analyses of covariance indicated no significant difference between the treatment groups for the age of men [$F(1, 48) = 2.07$, $p = .16$ (two-tailed)] and women [$F(1, 48) = 1.76$, $p = .19$ (two-tailed)]. CBCT couples indicated being together for approximately 6 years, while UT couples reported being together for approximately 7 years. Based on an analysis of covariance, participating couples in the CBCT and UT conditions did not differ significantly in the length of the relationship [$F(1, 41) = .11$, $p = .74$ (two-tailed)]. Therefore, age and relationship duration were not used a covariates in the statistical analysis.

A majority of participating couples reported the status of their relationship to be currently married and living together. No couples identified their relationship status as divorced. The breakdown of the couples' reported relationship status based upon treatment condition can be found in Table 1.

Table 1. Frequencies and Percentages of the Sample's Relationship Status by Treatment Condition

Relationship Status	Couples in the CBCT Condition	Couples in the UT Condition
Currently Married, Living Together	13 (54.2%)	17 (65.4%)
Currently Married, Separated	2 (8.3%)	0 (0%)
Divorced	0 (0%)	0 (0%)
Living Together, Not Married	4 (16.7%)	8 (30.8%)
Separated, Not Married	0 (0%)	0 (0%)
Dating, Not Living Together	5 (20.8%)	1 (3.8%)
Total	24 (100%)	26 (100%)

The racial makeup of the women and men in both treatment conditions reveals a racially diverse sample. More than 50% of males and females in both the CBCT and UT conditions identified their race as white, while the remainder identified with a variety of racial backgrounds. The frequencies and percentages of the racial makeup of the sample within each treatment condition by gender can be found in Table 2.

Table 2. Frequencies and Percentages of the Sample's Racial Makeup by Treatment Condition and Gender

Race	Females in the CBCT Condition	Males in the CBCT Condition	Females in the UT Condition	Males in the UT Condition
Native American	0 (0%)	0 (0%)	0 (0)%	1 (3.8%)
African American	6 (25.0%)	4 (16.7%)	4 (15.4%)	5 (19.2%)
Asian/Pacific Islander	2 (8.3%)	0 (0%)	1(3.8%)	0 (0%)
Hispanic	2 (8.3%)	1 (4.2%)	3 (11.5%)	2 (7.7%)
White	13 (54.2%)	17 (70.8%)	16 (61.5%)	17 (65.4%)

Other	1 (4.2%)	2 (8.3%)	2 (7.7%)	1 (3.8%)
Total	24 (100%)	24 (100%)	26 (100%)	26 (100%)

Based upon reports of annual income and highest level of education, the sample was diverse in socioeconomic status. The mean annual income for women in the CBCT condition was $29,455 (*SD* = $28,337) with a minimum income of $0 and a maximum income of $125,000. The mean annual income for men in the CBCT condition was $47,917 (*SD* = $31,754) with a minimum income of $0 and a maximum income of $130.000. The mean annual income for women in the UT condition was $22,827 (*SD* = $20,659) with a minimum income of $0 and a maximum income of $74,000. The mean annual income for men in the UT condition was $42,013 (*SD* = $21,393) with a minimum income of $9800 and a maximum income of $100,000. Most of the sample was highly educated, with a majority of females and males in both conditions attending some college or attaining advanced educational degrees. See Table 3 for the frequencies and percentages of women's and men's reported highest level of education in the CBCT and UT conditions.

Table 3. Percentages of the Sample's Highest Level of Education by Treatment Condition and Gender

Highest Level of Education	Females in the CBCT Condition	Males in the CBCT Condition	Females in the UT Condition	Males in the UT Condition
Some High School	2 (8.3%)	1 (4.2%)	0 (0%)	1 (3.8%)
High School Diploma	3 (12.5%)	6 (25.0%)	1 (3.8%)	5 (19.2%)
Some College	6 (25.0%)	3 (12.5%)	7 (26.9%)	4 (15.4%)
Associate Degree	0 (0%)	1 (4.2%)	3 (11.5%)	1 (3.8%)
Bachelors Degree	3 (12.5%)	6 (25.0%)	5 (19.2%)	4 (15.4%)
Some Graduate Education	2 (8.3%)	2 (8.3%)	2 (7.7%)	5 (19.2%)
Masters Degree	3 (12.5%)	3 (12.5%)	6 (23.1%)	6 (23.1%)
Doctoral Degree	2 (8.3%)	2 (8.3%)	1 (3.8%)	0 (0%)

Trade School	3 (12.5%)	0 (0%)	1 (3.8%)	0 (0%)
Total	24 (100%)	24 (100%)	26 (100%)	26 (100%)

Treatments

Every couple completed a pre-therapy assessment, 10 weekly 90-minute sessions in the randomly assigned treatment condition of CBCT or UT, and a post-therapy assessment. Both CBCT and UT conditions involved the couple engaging in conjoint sessions facilitated by co-therapists. Therapists were graduate student interns at the clinic, training to become licensed marriage and family therapists.

The CBCT condition followed the CAPP protocol emphasizing cognitive-behavioral interventions for anger management, communication, problem-solving, and general improvements in relationship functioning. Cognitive-restructuring interventions included in all CBCT sessions, as deemed appropriate by the therapists, included, re-attribution interventions intended to counteract maladaptive causal and responsibility attributions about the partner. Examples of these interventions include asking one member of the couple to consider alternative explanations for their partner's behavior, inviting feedback from the partner about his or her intentions with the other present to hear it, and countering trait attributions with evidence of variability in the partner's behavior. Other cognitive-restructuring interventions focus on modifying unrealistic relationship standards and assumptions that support aggression toward one's partner. Such interventions include challenging beliefs that aggression is justified, examining advantages and disadvantages of unrealistic standards that fuel anger and aggression, and challenging the assumption that anger is uncontrollable. Behavioral skills training in the CBCT condition may also target negative attributions about the partner. For example, communication skills training instruct partners to work together instead of against one

another, shifting their adversarial view of one another to one of cooperation. Additionally, skills training may counteract negative attributions by providing the couple with examples in which they are able to hear one another and make decisions together. For a detailed account of the 10 sessions in the CBCT condition refer to LaTaillade et al. (2006).

The UT condition employed one of several family systems models of therapy or an eclectic selection of family systems models at the discretion of the therapists, including but not limited to strategic, structural, narrative, and emotionally focused couples therapy. A variety of theoretical approaches were used by therapists working with the couples whose data are included in this study, with no approach being predominant. If UT therapists claimed to utilize the cognitive-behavioral model as part of the eclectic model of family systems models, the sessions did not follow the protocol of the CBCT condition. The following brief overview of a representative sampling of systems models used in the UT condition expands on the composition of the UT condition.

In the strategic model of couple therapy, problems are thought to arise from a maladaptive behavioral sequence surrounding a power struggle or inadequate hierarchy within the system and persist as the behavioral sequences become ingrained (Griffin & Green, 1999; Keim & Lappin, 2002). Therapy targets the removal of the presenting problem by altering the behavioral sequences surrounding the problem. The highly directive strategic therapist develops strategies to change the family interactions in- and out-of-session through the use of interventions such as paradoxical interventions (i.e., forecasting resistance to change, exaggerating the problem, and prescribing the

symptom), ordeals (i.e., connecting the presenting problem with an unfavorable activity), and reframing (i.e., offering a new conceptual lens from which to view the presenting problem).

From a narrative therapy framework, the couple's view of their world becomes saturated by the problems, such that the partners define their experience solely by the problems (Freedman & Combs, 2002; Griffin & Greene, 1999). Therapy produces change by deconstructing the problem-saturated story through questioning, framing the problem as external to each individual and the couple, joining the couple as a team to combat the problem, and rewriting their story by utilizing unique outcomes (i.e., exceptions to the problem-saturated story). The narrative therapist approaches the couple from an "unknowing" stance rather than one of expertise, asking questions based on curiosity to understand the couple's experience, and aids the couple in reconceptualizing their problem through a new story.

As a final example of a model utilized in the UT condition, emotionally focused therapy (EFT) is based on the assumption that problems arise when partners experience anxiety in their current intimate relationship when events in the relationship activate chronic negative internal "working models" of attachment that developed in their childhoods (Johnson & Denton, 2002). Problems persist as negative behavioral patterns that the two individuals automatically use to cope with their attachment insecurity form repetitive interaction cycles that reinforce the couple's problems. Therapy focuses on creating a secure base for each partner's attachment needs and emotions to be understood and eventually fulfilled. The EFT therapist facilitates the processing of negative emotions using empathy and validation, and restructures the couple's negative interaction cycle

through evocative questioning, tracking emotions, and heightening emotion with repetition, metaphor, and imagery.

For a detailed account of the theory and interventions of UT models for couple therapy refer to Gurman and Jacobson (2002). The usual treatment at the Center for Healthy Families within the protocol of the CAPP program instructed therapists to utilize one or a select group of the systems-oriented models regularly used as the therapeutic intervention for couples. Therapists remained in the selected therapeutic model or models throughout the duration of treatment with the couple.

Measures

Demographics. The demographics form (See Appendix A) gathered information including age, duration of relationship, relationship status, race, highest level of education, and income.

Measure of attributions. Change in negative attributions about one's partner served as a dependent variable in this study. In addition, change in negative attributions was examined as a possible correlate of changes in relationship satisfaction, communication behavior, and psychological aggression as a function of treatment. The *Marital Attitude Survey* (MAS; Pretzer, Epstein, & Fleming, 1991) was used as the measure of attributions in the study. The MAS includes six subscales that assess attributions that individuals make regarding relationship problems in terms of content categories along the dimensions of Attribution of Causality to Own Behavior, Attribution of Causality to Own Personality, Attribution of Causality to Spouse's Behavior, Attribution of Causality to Spouse's Personality, Attribution of Malicious Intent to Spouse, and Attributions of Lack of Love of Spouse. The MAS also includes two

expectancy subscales (i.e., Perceived Ability of Couple to Change Relationship and Expectancy of Improvement in Relationship) that were not used in this study. Participants were asked to indicate how much they agree or disagree with each MAS statement on a five-point Likert scale: 1 = strongly agree, 2 = agree somewhat, 3 = neutral, 4 = disagree somewhat, 5= strongly disagree. The subscales of the MAS previously were found to have high internal consistency as assessed by Cronbach's coefficient alpha (alphas ranging from .66 for Attribution of Causality to Spouse's Personality to .93 for Attribution of Malicious Intent to Spouse), except for the Attribution of Causality to Own Behavior with an alpha of .58 (Pretzer, Epstein, & Fleming, 1991).

The current study examined negative attributions about partner responsibility for relationship problems. Therefore, the MAS subscales assessing Attributions of Causality to Partner Behavior (e.g., "The way my partner treats me determines how well we get along."), Attributions of Causality to Partner Personality (e.g., "My partner's personality would have to change for us to get along better."), Attribution of Malicious Intent to Spouse (e.g., "It seems as though my partner deliberately provokes me."), and Attribution of Lack of Love of Spouse (e.g., "When things are rough between us it shows that my partner doesn't love me.") served as the index of negative attributions about the partner (For Subscale Items see Appendix B). Higher scores on each subscale represented more negative attributions about the partner, as did higher scores on the composite of the four subscales, which was used in the analyses.

Measure of relationship satisfaction. The study assessed relationship satisfaction with the *Dyadic Adjustment Scale* (DAS; Spanier, 1976; Appendix C), a widely-used measure of the quality of a dyadic relationship that includes four subscales (dyadic

consensus, dyadic satisfaction, affectional expression, and dyadic cohesion). The DAS consists of 32 items, with the composite of the four subscales producing a total dyadic adjustment score for each partner that can range from 0 to 152. Higher total scores signify a higher level of relationship satisfaction. Although the DAS scores constitute a continuous variable, individuals with scores of 100 or below commonly are considered to be distressed. The degree of change in relationship satisfaction from pre- to post-treatment was a dependent variable in the current study. The DAS displays high internal consistency overall, with a Cronbach's coefficient alpha of .96 for the total score (Spanier, 1976). Convergent validity of the scale has been established based on a high correlation with scores on the Locke-Wallace (1959) Marital Adjustment Scale. Additionally, the criterion-validity of the DAS has been established as the measure can differentiate between distressed and non-distressed couples (Spanier, 1976).

Measure of communication behavior. To measure communication behaviors, researchers have designed coding systems to describe couples' interactions at a micro-analytic level (each statement or other expression by each member of the couple is assigned a content code), such as the widely used *Marital Interaction Coding System* (MICS; Weiss & Summers, 1983). Weiss and Tolman (1990) developed a global coding version of the MICS as an alternative to the micro-analytic version. In the present study, positive and negative communication behaviors were assessed with the global version, the *Marital Interaction Coding System - Global* (MICS-G; Weiss & Tolman, 1990).

The MICS-G contains six summary codes consisting of content and affect cues to measure what each member said to the other and how it was said. Of the six summary codes, the three positive communication categories are problem solving, facilitation, and

validation. Problem solving includes problem description, proposing a positive or negative solution, compromise, calm, and reasonableness. Facilitation includes positive mind reading, paraphrasing, use of humor, smiling, laughing, maintaining an open posture, and use of a warm tone of voice. Validation includes agreement, assent, approval, accepting responsibility, and receptivity. The three negative communication codes are conflict, invalidation, and withdrawal. Conflict includes complaining, criticism, negative mind reading, insults, negative commands, hostility, sarcasm, and angry/bitter voice. Invalidation includes disagreement, denial of responsibility, changing the subject, consistent interruption, turn off behaviors, and domineering behaviors. Lastly, withdrawal includes negation, no response, being non-contributive, erecting physical barriers (e.g., placing one's hand over one's eyes, crossing one's arms over one's chest), and increasing distance.

The six summary category ratings range from *0 (none)* to *5 (very high)* based upon ratings of the content and affect cues associated with each summary category. Ratings for each subcategory are assigned for the male and for the female partner for each two-minute interval of the 10-minute videotaped communication sample of the couple engaging in a discussion of a topic of conflict in their relationship. The manual instructs raters to consider the frequency and intensity when assigning a rating to each subcategory ranging from *0 (none)* to *5 (very high)*. The subcategory ratings for each interval are averaged to create a summary category rating for problem solving, validation, facilitation, conflict, invalidation, and withdrawal ranging from *0 (none)* to *5 (very high)*. The ratings are as followed: *0 (none)* – no category cues observed, *1 (very low)* – 10% or less of interaction time was involved with the specific category of behaviors, or that any

of the exemplar behaviors had minimal impact, *2 (low)* – 30% of interaction time or many behaviors of low impact, *3 (moderate)* – 50% of interaction time or the behaviors has a considerable impact, *4 (high)* – 70% of interaction time or many behaviors has strong impact, and *5 (very high)* – 90% of the interaction time or few very strong instances of criterion behaviors. The five summary scores for each two minute interval for each summary category were averaged for each partner to devise six overall summary scores for both the male and female partners.

The MICS-G has demonstrated moderate convergent validity and high discriminant validity among the summary categories. In addition, the criterion-validity of the MICS-G has been established, as the measure can differentiate between distressed and non-distressed couples (Weiss & Tolman, 1990).

The present study used MICS-G data collected within the original CAPP study, in which trained undergraduate raters coded the communication samples of all of the participating couples. Negative and positive communication composite scores were used for each partner in the statistical analyses by averaging the overall summary scores for the three negative and three positive communication categories. Changes in negative and positive communication behavior from pre- to post-therapy were two dependent variables in the current study.

Measure of psychological abuse. In the present study, psychologically abusive behavior was assessed with the *Multidimensional Measure of Emotional Abuse* (MMEA; Murphy & Hoover, 2001), which measured the frequencies of specific instances of psychological abuse perpetrated by oneself or one's partner in the past four months. Participants rated the frequency of each type of behavior by self and by the partner using

a response scale: 0 = not at all, 1 = once, 2 = twice, 3 = 3-5 times, 4 = 6-10 times, 5 = 11-20 times, 6 = more than 20 times, 9 = this has never happened. Each of the 28 items is associated with one of four subscales (See Appendix D for subscale items), including Hostile Withdraw (e.g., "Acted cold or distant when angry"), Domination/Intimidation (e.g., "Threatened to hit the other person"), Denigration (e.g., "Called the other person worthless") and Restrictive Engulfment (e.g., "Secretly searched through the other person's belongings").

Procedure

In the original CAPP study from which data for this study were drawn, couples seeking assistance from the Center for Healthy Families (CHF) for a variety of relationship problems were randomly assigned to a treatment condition, CBCT or UT, at intake (See Figure 1: Study Design). Because therapists self-selected themselves to deliver one of the two treatment conditions, the couples' cases were assigned to co-therapist teams based on treatment condition. The therapists contacted the couples to set up an initial assessment with them. The first assessment lasted approximately two hours and provided the information necessary to determine eligibility for the CAPP project though self-report questionnaires and individual interviews. During the first assessment the demographics form, DAS, and MMEA that were used in the present study were among the measures administered to both members of the couple to collect pre-treatment data on the relationship.

Once a couple was offered inclusion in CAPP and they consented to participate, the couple completed a second assessment involving a 10-minute communication sample and another battery of self-report measures. The second assessment lasted approximately

two hours. To complete the communication sample, therapists instructed couples to discuss and attempt to resolve a relationship issue designated by both partners in the first assessment as being of mild to moderate concern to them based upon the *Relationship Issues Survey* (Epstein, 1999). The RIS asks each partner to indicate how much each listed area is presently a source of disagreement and conflict in the relationship with the partner, using a rating scale of 0 = not at all a source of disagreement or conflict, 1 = slightly a source of disagreement or conflict, 2 = moderately a source of disagreement or conflict, and 3 = very much a source of disagreement or conflict. Potential areas of disagreement listed on the RIS include relationship with friends, finances (income, how money is spent, etc.), sexual relationship, amount of commitment to the relationship, trustworthiness, and how decisions are made, among others. Therapists reviewed each partner's RIS and selected a topic that had been rated a 2 by both partners to assign to the couple to discuss in their communication sample. A lapel microphone was fastened to each partner to obtain audio, and a video camera was positioned to capture both partners to obtain a visual image of the discussion. After giving the couple instructions for the task, the therapists exited the room and watched the discussion through a one-way mirror to ensure the safety of the couple. Therapists timed the discussion and terminated the interaction after 10 minutes.

Additionally, the MAS was administered during the second assessment to both members of the couple to collect information on negative attributions about the partner's contribution to relationship problems. Members of the couple were separated during the administration and completion of the self-report questionnaires.

Each couple in CAPP completed 10 weekly 90-minute conjoint therapy sessions

in the assigned treatment condition within a 3- to 4½-month period. The CBCT group received the treatment outlined in LaTaillade et al. (2006), including components of psychoeducation about abuse, communication, problem-solving, and anger management skills training, and practice/application of skills. The UT group received treatment as usual from a variety of family systems orientations, with a general focus on preventing abusive behavior escalation and improving relationship functioning. The selection of the treatment model or models utilized in the UT condition was determined by the therapists. During treatment, couples would be eliminated from CAPP if experiencing an incident of domestic abuse resulting in physical injury needing medical attention. In such cases, each member of the couple would be offered individual therapy sessions until safety sufficient for conjoint treatment was determined.

Following the 10 CBCT or UT sessions, couples completed the post-treatment assessment, including a communication sample utilizing the same procedures as the pre-treatment assessment and a battery of self-report questionnaires. The DAS, MMEA, and MAS were administered as part of the post-treatment assessment. The post-treatment assessment lasted approximately two hours, and members of the couple were separated during the administration and completion of the self-report questionnaires.

As described earlier, the video-taped communication samples from pre- and post-treatment assessments were coded by trained undergraduate raters using the MICS-G. Two raters coded each communication sample to establish reliability. The coders resolved discrepancies between their ratings, designated as a difference between the two coders' scores for a code that was larger than one point on the rating scale, through discussion and reaching consensus.

CHAPTER 3

Results

Overview of Analyses

The study utilized a pretest-posttest control group design with a standard treatment control group. Descriptive statistics were computed for age, duration of relationship, relationship status, race, highest level of education, and income reported separately by participant gender within each treatment condition. The descriptive analysis consisted of means and standard deviations for continuous variables, and frequencies for categorical variables.

Paired *t*-tests were used to test hypotheses #1, #3, #4, #5, and #10 by using the pre- and post- data points for the variables of interest: the total MAS score based on four subscales (i.e., causality to partner's behavior, causality to partner's personality, malicious intent, and lack of love subscales), the total DAS score, the composite negative and positive communication scores, and the partner's reports of the individual's frequency of use of each of the four types of psychological abuse (i.e., hostile withdrawal, denigration, domination/intimidation, and restrictive engulfment). Each paired *t*-test was conducted by gender within each treatment condition.

Because data were collected at two times and the research questions focus on change over time, change variables were created using the difference between the post-therapy data point and the pre-therapy data point for each variable of interest.

Univariate analysis of covariance was used to test hypotheses #2, #6, #8, and #11. In each analysis, the independent variable was treatment condition (CBCT versus UT), the dependent variable was change scores on the DAS, MAS, MMEA, or MICS-G, and

the covariate was pre-therapy scores on the corresponding dependent variable. Each analysis of covariance was conducted twice, separately by gender.

Univariate analyses of covariance were used to test hypotheses #7, #9, and #12. In each analysis, the independent variable was treatment condition (CBCT versus UT), the dependent variable was change in total DAS, change in MAS, change in the use of negative and positive communication behaviors, and change in each of the four types of psychological abuse, and the covariates were change in attributions and pre-therapy scores on the corresponding dependent variable. Each analysis of variance was conducted twice, separately by gender.

Hypotheses #13, #14, #15 and #16 were tested using Pearson's correlation coefficients between all change variables of interest: change in total DAS, change in MAS, changes in the use of negative and positive communication behaviors, and change in each of the four types of psychological abuse. Within each of the two treatment conditions correlations were computed among degrees of the change in DAS, MAS, positive and negative composite scores from use of the MICS-G, and MMEA scores for each gender. Because change scores were computed by subtracting subjects' pre-therapy scores from post-therapy scores, positive change scores on the DAS and MICS-G positive communication measure indicated an increase in these positive characteristics, whereas negative change scores on the MAS, MMEA, and MICS-G negative communication measure indicated a decrease in these negative characteristics. One-tailed tests for significance were utilized for all *t*-tests and Pearson's correlations due to the directional hypotheses predicting more cognitive and behavioral change, and a stronger relationship between attribution change and behavior change in the CBCT condition.

Demographics

The means and standard deviations for age, personal annual income, and number of years together were calculated separately for males and females in each of the treatment conditions. The frequencies and percentages for relationship status, race, and highest level of education were calculated separately for men and women in each of the treatment conditions. The results are reported in Chapter 3: Methods, in the Sample section.

Tests of Hypotheses

The results of the analyses are presented below for each hypothesis.

Hypothesis 1: Negative attributions about partners will decrease in members of couples completing CBCT and UT. In the analysis of women and men in the CBCT and UT conditions, the subjects' attribution scores prior to treatment and following treatment were used in paired *t*-tests (See Table 4 for the group means and standard deviations). Results indicated that attributions were modified in the expected direction, such that negative attributions significantly decreased for women completing CBCT [t (22) = 2.18, p = .02 (one-tailed)], men completing CBCT [t (22) = 2.61, p = .008 (one-tailed)], and women completing UT [t (24) = 2.69, p = .007 (one-tailed)]. Results indicated a trend for men completing the UT condition to report a decrease in negative attributions [t (24) = 1.60, p = .06 (one-tailed)].

Table 4. Pre- and Post-Treatment Means and Standard Deviations for Attributions

	Pre-Treatment Scores (Means and Standard Deviations)	Post-Treatment Scores (Means and Standard Deviations)
MAS scores		
CBCT		
Females	*X* = 75.57, *SD* = 16.38	*X* = 82.83, *SD* = 19.39
Males	*X* = 73.04, *SD* = 21.56	*X* = 83.17, *SD* = 19.07
UT		
Females	*X* = 75.68, *SD* = 17.10	*X* = 83.00, *SD* = 17.33
Males	*X* = 80.92, *SD* = 17.11	*X* = 85.32, *SD* = 15.03

Overall, hypothesis 1 was supported as women and men in the CBCT condition, and women in the UT condition reported a significant decrease in negative attributions. The decrease in negative attributions for men in the UT condition approached significance.

Hypothesis 2: CBCT will have a larger effect than UT on the modification of negative attributions. In the analyses of covariance for women and men, the independent variable was treatment condition (CBCT versus UT), the dependent variable was the change scores on the MAS, and the covariate was pre-test scores on the MAS. Results indicated no significant difference between CBCT and UT on the modification of negative attributions of women [F (1, 45) = .001, p = .98 (two-tailed)] or men [F (1, 45) = 1.47, p = .23 (two-tailed)], when controlling for pre-treatment attribution scores**.** Therefore, the statistical analysis did not provide support for hypothesis 2.

Hypothesis 3: Relationship satisfaction will increase in couples completing CBCT and UT. In the analysis of women and men in the CBCT and UT conditions, the DAS relationship satisfaction scores prior to treatment and following treatment were used in

the paired *t*-tests (See Table 5 for means and standard deviations). Results indicated a significant increase in relationship satisfaction for women in the CBCT condition [t (22) = 2.22, p = .02 (one-tailed)], men in the CBCT condition [$t(22) = 3.28$, $p < .001$ (one-tailed)], women in the UT condition [$t(24) = 4.64$, $p < .001$ (one-tailed)], and men in the UT condition [$t(24) = 3.48$, $p = .001$ (one-tailed)]. Hypothesis 3 was supported as relationship satisfaction increased significantly for both women and men in the CBCT and UT conditions. Jacobson et al. (1984) found that with a score of 97 on the DAS a case was equally likely to be distressed or non-distressed. Therefore, marital researchers and clinicians typically consider any score over 97 to be in the non-distressed range. Accordingly, in the present study the mean relationship satisfaction scores on the DAS for men in the CBCT and men and women in the UT conditions began in the distressed range prior to treatment and rose into the non-distressed range following treatment. The average DAS score for females in the CBCT condition began in the distressed range prior to treatment and was on the borderline of the non-distressed cutoff following treatment.

Table 5. Pre- and Post-Treatment Means and Standard Deviations for Relationship Satisfaction

	Pre-Treatment Scores (Means and Standard Deviations)	Post-Treatment Scores (Means and Standard Deviations)
DAS scores		
CBCT		
Females	X = 85.70, SD = 24.14	X = 97.39, SD = 21.89
Males	X = 91.35, SD = 23.16	X = 103.30, SD = 16.59
UT		
Females	X = 86.48, SD = 21.21	X = 100.00, SD = 18.46
Males	X = 93.36, SD = 20.18	X = 102.56, SD = 19.80

Hypothesis 4: Negative communication will decrease in couples completing CBCT and UT. In the analysis of women and men in the CBCT and UT conditions, the MICS-G negative communication scores prior to treatment and following treatment were used in the paired *t*-tests (See Table 6 for means and standard deviations). Results indicated a significant decrease in negative communication behavior for women [$t(16) = 3.37$, $p = .002$ (one-tailed)] and men [$t(16) = 2.24$, $p = .02$ (one-tailed)] in the CBCT condition. However in the UT condition, no significant changes in the negative communication behavior were found for women [$t(17) = .02$, $p = .49$ (one-tailed)] and men [$t(17) = 1.09$, $p = .15$ (one-tailed)]. Hypothesis 4 was supported for couples in the CBCT condition, but was not supported for couples in the UT condition.

Table 6. Pre- and Post-Treatment Means and Standard Deviations for Negative Communication Based on the MICS-G

	Pre-Treatment Scores (Means and Standard Deviations)	Post-Treatment Scores (Means and Standard Deviations)
MICS-G: Negative Communication scores		
CBCT		
Females	X =1.27, SD = .99	X = .52, SD = .42
Males	X = 1.09, SD = .94	X = .52, SD = .44
UT		
Females	X = 1.10, SD = .98	X = 1.10, SD = .82
Males	X = 1.29, SD = .98	X = 1.08, SD = .90

Hypothesis 5: Positive communication will increase in couples completing CBCT and UT. In the analysis of women and men in the CBCT and UT conditions, the MICS-G positive communication scores prior to treatment and following treatment were used in the paired *t*-tests (See Table 7 for means and standard deviations). In the CBCT

condition, results indicated no significant change in positive communication behavior for women [$t(16) = -.69$, $p = .25$ (one-tailed)] or men [$t(16) = -1.10$, $p = .14$ (one-tailed)]. Additionally, results examining couples in the UT condition indicated no significant change in positive communication behavior for women [$t(17) = -1.26$, $p = .11$ (one-tailed)] and men [$t(17) = -.80$, $p = .23$ (one-tailed)]. Overall, hypothesis 5 was not supported by the statistical analysis.

Table 7. Pre- and Post-Treatment Means and Standard Deviations for Positive Communication Based on the MICS-G

	Pre-Treatment Scores (Means and Standard Deviations)	Post-Treatment Scores (Means and Standard Deviations)
MICS-G: Positive Communication scores		
CBCT		
Females	$X = 3.74$, $SD = 1.01$	$X = 3.95$, $SD = .92$
Males	$X = 3.80$, $SD = .83$	$X = 4.12$, $SD = 1.02$
UT		
Females	$X = 3.00$, $SD = 1.03$	$X = 3.31$, $SD = .74$
Males	$X = 2.98$, $SD = 1.07$	$X = 3.17$, $SD = 1.01$

Hypothesis 6: CBCT will have a larger effect than UT on the decease of negative communication behavior. In the analysis of covariance for women and men, the independent variable was treatment condition (CBCT versus UT), the dependent variable was the change in negative communication behavior based upon the MICS-G, and the covariate was pre-test negative communication. The statistical analysis resulted in a significant difference in change of negative communication behavior between females in the CBCT and UT conditions [$F(1, 32) = 7.26$, $p = .011$ (two-tailed)]. The mean change in negative communication behavior for women in the CBCT condition was -.65 and for

women in the UT condition was -.08. Therefore, negative communication behavior decreased more for women in the CBCT condition compared to the UT condition.

Table 8: ANOVA: Female Negative Communication Change Based on Treatment Condition

Source	Sum of Squares	Degrees of Freedom	Mean Square	*F*	Significance
Female Pre-test Negative Communication	17.37	1	17.37	44.67	<.001
Treatment Condition	2.82	1	2.82	7.26	.011
Error	12.44	32	0.39		
Total	38.54	35			

Results for the analysis of covariance for males indicated a main effect for the change in negative communication for men in the CBCT condition compared to the UT condition [$F(1, 32) = 4.49$, $p = .042$] when controlling for male pre-treatment negative communication behavior. The mean change of negative communication behavior for men in the CBCT condition was -.64 and for men in the UT condition was -.18. Therefore, negative communication behavior decreased more in the CBCT condition than the UT condition.

Table 9: ANOVA: Male Negative Communication Change Based on Treatment Condition

Source	Sum of Squares	Degrees of Freedom	Mean Square	*F*	Significance
Male Pre-test Negative Communication	13.12	1	13.12	32.62	<.001
Treatment Condition	1.81	1	1.81	4.49	.042
Error	12.87	32	0.40		
Total	32.67	35			

Overall, hypothesis 6 was supported because negative communication behavior decreased more in the CBCT condition compared to the UT condition for both men and women.

Hypothesis 7: If CBCT has a larger effect than UT on the decrease of negative communication, then the difference is mediated by the change in negative attributions. Since the statistical analysis for hypothesis 6 indicated that negative communication behavior decreased more for women and men in the CBCT condition compared to women and men in the UT condition, hypothesis 7 was tested to explore the role of negative attribution change in the difference in communication change between conditions. In the analyses of variance for women and men, the independent variable was treatment condition (CBCT or UT), the dependent variable was change in negative communication behavior, and the covariates were pre-test negative communication scores and change in negative attributions. Because the difference between females in CBCT and UT continued to be significant when controlling for change in female negative attributions [$F(1, 31) = 7.16$, $p = .012$ (two-tailed)], results indicated that female negative attribution change did not mediate the differential decrease in negative communication behavior between CBCT and UT.

Table 10: ANOVA: Female Negative Communication Change Based on Treatment Condition and Controlling for Negative Attribution Change

Source	Sum of Squares	Degrees of Freedom	Mean Square	*F*	Significance
Female Pre-test Negative Communication	16.20	1	16.20	51.04	< .001
Female Negative Attribution Change	2.60	1	2.60	8.21	.007
Treatment Condition	2.27	1	2.27	7.16	.012
Error	9.84	31	0.32		
Total	38.54	35			

The analysis of variance for males exploring the role of attribution change in the difference between treatment conditions in the decrease of negative communication behavior indicated a trend toward attribution change mediating male change in negative communication behavior, because after controlling for attribution change the treatment group difference in change in negative behavior only reached the level of a trend [$F(1, 31) = 1.29$, $p = .08$ (two-tailed)] rather than still being significant.

Table 11: ANOVA: Male Negative Communication Change Based on Treatment Condition and Controlling for Negative Attribution Change

Source	Sum of Squares	Degrees of Freedom	Mean Square	*F*	Significance
Male Pre-test Negative Communication	6.42	1	6.42	16.06	< .001
Male Negative Attribution Change	0.47	1	.47	1.16	.29
Treatment Condition	1.29	1	1.29	3.21	.08
Error	12.40	31	0.40		
Total	32.67	35			

Hypothesis 8: CBCT will have a larger effect than UT on the increase of positive communication behavior. Based on insignificant results for hypothesis 5 indicating that positive communication behavior did not change for men and women in the CBCT and UT conditions, the statistical analysis for hypothesis 8 exploring between group differences in change in positive communication behavior was not conducted.

Hypothesis 9: If CBCT has a larger effect than UT on the increase of positive communication, then the difference is mediated by the change in negative attributions. The statistical analysis for hypothesis 9 was not conducted as a follow-up to hypothesis 8 because the statistical analysis for hypothesis 8 was not conducted. Again, due to insignificant results for hypothesis 5 indicating that positive communication behavior did not change for men and women in the CBCT and UT conditions, exploring between-group differences in positive communication change and the possible mediating role of negative attribution change was not a logical follow-up.

Hypothesis 10: Psychological abuse as reported by the partner will decrease in couples completing CBCT and UT. In the analysis of women and men in the CBCT and UT conditions, the MMEA psychological abuse scores as reported by one partner about the other prior to treatment and following treatment were used in the paired *t*-tests. The means and standard deviations were calculated for each of the four types of psychological abuse (i.e., hostile withdrawal, domination/intimidation, denigration, and restrictive engulfment) and can be found in Table 12.

The analyses indicated that females in the CBCT condition reported significant decreases in their male partners' use of hostile withdrawal [$t(22) = 3.78$, $p < .001$ (one-tailed)], domination/intimidation [$t(22) = 2.03$, $p = .003$ (one-tailed)], and denigration [(22) = 2.26, $p < .002$ (one-tailed)]. Females in the CBCT condition did not report a significant change in their male partners' use of restrictive engulfment [$t(22) = 1.13$, $p = .13$ (one-tailed)].

Males in the CBCT condition reported significant decreases in their female partners' use of hostile withdrawal [$t(22) = 2.59$, $p = .009$ (one-tailed)], domination/intimidation [$t(22) = 2.04$, $p = .003$ (one-tailed)], and denigration [$t(22) = 1.90$, $p = .04$ (one-tailed)]. Males in the CBCT condition did not report significant change in their female partners' use of restrictive engulfment [$t(22) = 0.90$, $p = .19$ (one-tailed)].

Females in the UT condition reported significant decreases in their male partners' use of hostile withdrawal [$t(24) = 3.58$, $p = .001$ (one-tailed)], domination/intimidation [$t(24) = 3.43$, $p = .001$ (one-tailed)], and denigration [$t(24) = 2.91$, $p = .004$ (one-tailed)]. Females in the UT condition did not report significant change in their male partners' use of restrictive engulfment [$t(24) = 1.44$, $p = .08$ (one-tailed)].

The analyses indicated that males in the UT condition reported significant decreases in their female partners' use of hostile withdrawal [$t(24) = 1.96$, $p = .03$ (one-tailed)], denigration [$t(24) = 2.56$, $p = .009$ (one-tailed)], and restrictive engulfment [$t(24) = 2.12$, $p = .02$ (one-tailed)]. Males in the UT condition did not report a significant change in their female partner's use of domination/intimidation [$t(24) = 0.74$, $p = .23$ (one-tailed)].

Generally, the analysis supported hypothesis 10. Women in both conditions and men in the CBCT condition reported significant decreases in their partner's use of three of the four types of psychological abuse, including hostile withdrawal, domination/intimidation, and denigration. Males in the UT condition also reported significant decreases in their partner's use of hostile withdrawal and denigration. However, males in the UT condition did not report significant decreases in their partner's use of domination/intimidation. Instead, males in the UT condition reported a significant decrease in their female partners' use of restrictive engulfment.

Table 12. Pre- and Post-Treatment Means and Standard Deviations for Four Types of Psychological Abuse

MDEA scores	Pre-Treatment Scores (Means and Standard Deviations)	Post-Treatment Scores (Means and Standard Deviations)
Hostile Withdrawal		
CBCT		
Female Report of Male	*X* = 19.13, *SD* = 11.23	*X* = 10.39, *SD* = 8.10
Male Report of Female	*X* = 13.26, *SD* =10.36	*X* = 7.57 , *SD* = 6.97
UT		
Female Report of Male	*X* = 17.04, *SD* = 13.08	*X* = 9.84, *SD* = 8.84
Male Report of Female	*X* = 12.12, *SD* = 10.56	*X* = 9.32, *SD* = 8.72
Domination / Intimidation		
CBCT		
Female Report of Male	*X* = 3.83, *SD* = 3.92	*X* = 2.43, *SD* = 3.29
Male Report of Female	*X* = 3.83, *SD* = 4.85	*X* = 1.74, *SD* = 2.43
UT		
Female Report of Male	*X* = 4.84, *SD* = 5.92	*X* = 1.32, *SD* = 2.17
Male Report of Female	*X* = 2.24, *SD* = 3.37	*X* = 1.76, *SD* = 3.42
Denigration		
CBCT		
Female Report of Male	*X* = 5.65, *SD* = 9.32	*X* = 2.22, *SD* = 3.18
Male Report of Female	*X* = 6.65, *SD* = 11.19	*X* = 2.57, *SD* = 5.72
UT		
Female Report of Male	*X* = 4.84, *SD* = 6.57	*X* = 1.44, *SD* = 2.10
Male Report of Female	*X* = 3.92, *SD* = 5.71	*X* = 1.72, *SD* = 2.39
Restrictive Engulfment		
CBCT		
Female Report of Male	*X* = 6.83, *SD* = 9.38	*X* = 5.00, *SD* = 8.03
Male Report of Female	*X* = 6.61, *SD* = 10.62	*X* = 4.78, *SD* = 5.17
UT		
Female Report of Male	*X* = 3.72, *SD* = 5.93	*X* = 2.08, *SD* = 3.80
Male Report of Female	*X* = 5.72, *SD* = 7.81	*X* = 3.40, *SD* = 4.98

Hypothesis 11: CBCT will have a larger effect than UT on the decrease of psychological abuse. To conduct the analyses of covariance for women and men, the independent variable in each analysis was treatment condition (CBCT versus UT), the dependent variable in each analysis was change scores on one of the four MMEA subscales reported about the partner (i.e., hostile withdrawal, domination/intimidation,

denigration, and restrictive engulfment), and the covariate was pre-test scores on the respective MMEA subscale.

When examining differences between females in the CBCT and UT conditions in regard to their reports of change in male use of psychological abuse, the analyses indicated no significant difference between women's reports of their partners' decreased use of hostile withdrawal [F (1, 45) = 0.01, p = .92 (two-tailed)], denigration [F (1, 45) = 1.03, p = .32 (two-tailed)], and restrictive engulfment [F (1, 45) = 1.01, p = .32 (two-tailed)]. However, results indicated a significant difference between female reports of their male partners' changed use of domination/intimidation [F (1, 45) = 4.03, p = .05 (two-tailed)] in the CBCT and UT conditions. In reviewing the difference between pre- and post-therapy means for female reports of their male partners' domination/intimidation in the CBCT (pre-therapy mean = 3.83 and post-therapy mean = 2.43) and UT (pre-therapy mean = 4.84 and post-therapy mean = 1.32) condition, the larger decrease was reported by females in the UT condition.

Table 13: ANOVA: Female Reports of Male Partner Decrease in Use of Domination/Intimidation Based on Treatment Condition

Source	Sum of Squares	Degrees of Freedom	Mean Square	*F*	Significance
Male Pre-test Domination/ Intimidation as Reported by Female	611.03	1	611.03	106.29	< .001
Treatment Condition	23.19	1	23.19	4.03	.05
Error	258.69	45	5.75		
Total	1224.00	48			

No significant differences between CBCT and UT were found in male reports of their female partners' decreased use of psychological abuse for hostile withdrawal [F (1, 45) = 1.35, p = .25 (one-tailed)], domination/intimidation [F (1, 45) = 0.28, p = .60 (one-tailed)], denigration [F (1, 45) = 0.04, p = .84 (one-tailed)], and restrictive engulfment [F (1, 45) = 0.80, p = .36 (one-tailed)].

Overall, hypothesis 11 was not supported by the results because seven of the eight findings indicated no significant differences between CBCT and UT in decreases in forms of psychological abuse. The only significant difference between CBCT and UT was found for female reports of their male partners' decreased use of domination/intimidation. However, contrary to predictions, the females in the UT condition reported a greater decrease in their male partners' use of domination/intimidation compared to females in the CBCT condition.

Hypothesis 12: If CBCT has a larger effect than UT on the decrease of psychological abuse, then the difference is mediated by the change in negative attributions. Results from hypothesis 11 indicated that CBCT did not have a larger effect than UT on the decrease of psychological abuse. In fact, UT was found to have a larger effect on the decrease of female reports of males' use of domination/intimidation.

Because women in the UT condition reported more of a decrease in their partners' use of domination/intimidation compared to the women in the CBCT condition, a follow-up analysis of covariance was conducted to examine the role of decreased attributions in the difference in change in domination/intimidation between treatment conditions. To conduct the analysis of variance, the independent variable was treatment condition (CBCT versus UT), the dependent variable was change scores on the

domination/intimidation subscale reported about the male partner, and the covariates were pre-therapy reports of male use of domination/intimidation as reported by females and change in male MAS negative attribution scores. The analysis of covariance indicated a trend toward male attribution change mediating male change in domination/intimidation, because after controlling for change in males' negative attributions the treatment group difference in males' domination/intimidation reached only a trend rather than still being significant [$F(1, 44) = 3.52$, $p = .067$ (two-tailed)].

Table 14: ANOVA: Female Reports of Male Partner Use of Domination/Intimidation Based on Treatment Condition and Controlling for Negative Attribution Change

Source	Sum of Squares	Degrees of Freedom	Mean Square	*F*	Significance
Male Pre-test Domination/ Intimidation as Reported by Female	252.73	1	252.73	18.09	<.001
Male Negative Attribution Change	2.28	1	2.72	.16	.69
Treatment Condition	49.22	1	49.22	3.52	.067
Error	614.77	44	13.97		
Total	1224.00	48			

Hypothesis 13: Decrease in negative attributions will be associated with improved relationship satisfaction for couples completing CBCT and UT. The analysis utilized Pearson correlations between the change in total DAS scores and the change in MAS scores. The correlations were conducted separately for males and females in the CBCT and UT conditions.

The decrease in negative attributions was significantly associated with an increase in relationship satisfaction for women [r = -.40, p = .03 (one-tailed)] and men [r = -.45, p = .02 (one-tailed)] in the CBCT condition. Decrease in negative attributions was significantly related to improved relationship satisfaction for women [r = -.51, p = .005 (one-tailed)], but not for men [r = -.23, p = .13 (one-tailed)] in the UT condition. Hypothesis 13 was supported for women in both conditions and men in the CBCT condition, but was not supported for men in the UT condition.

Hypothesis 14: Decrease in negative attributions will be associated with decreased negative communication for couples completing CBCT and UT. The analysis utilized Pearson correlations between the change in negative communication scores and the change in MAS scores. The correlations were conducted separately for males and females in the CBCT and UT conditions.

The decrease in negative attributions was significantly associated with decreases in negative communication for women [r = .64, p = .003 (one-tailed)] and men [r = .65, p = .002 (one-tailed)] in the CBCT condition. In the UT condition, a decrease in negative attributions was not significantly associated with a decrease in negative communication for women [r = .10, p = .35 (one-tailed)] but there was a trend in the hypothesized direction for men [r = .33, p = .09 (one-tailed)].

Hypothesis 15: Decrease in negative attributions will be associated with increased positive communication for couples completing CBCT and UT. The analysis utilized Pearson correlations between the change in positive communication scores and the change in MAS scores. The correlations were conducted separately for males and females in the CBCT and UT conditions.

The decrease in negative attributions was significantly associated with an increase in positive communication for women [r = -.44, p = .04 (one-tailed)] in the CBCT condition. Results indicated a trend toward an association between the decrease in negative attributions and an increase in positive communication for men [r = -.38, p = .07 (one-tailed)] in the CBCT condition. For couples in the UT condition, decreases in negative attributions were significantly associated with increases in positive communication for men [r = -.49, p = .02 (one-tailed)]. A decrease in negative attributions for women in the UT condition was not associated with an increase in positive communication [r = -.001, p = .50 (one-tailed)].

Hypothesis 16: Decrease in negative attributions will be associated with decreased psychological abuse for couples completing CBCT and UT. In the analysis, Pearson correlations were conducted between change in individuals' MAS scores and change in their MMEA scores for each of the four subscales of psychological abuse as rated by their partner. For example, the relation between change in the female partner's self-reported attributions and change in the male partner's report of their female partner's use of psychological abuse was examined. The correlations were conducted separately for males and females in the CBCT and UT conditions.

The analyses indicated that for women in the CBCT condition, female decrease in negative attributions was not significantly related to a decrease in psychological abuse reported by the male about the female partner: hostile withdrawal [r = .001, p = .50 (one-tailed)], domination/intimidation [r = .11, p = .30 (one-tailed)], denigration [r = .11, p = .31 (one-tailed)], and restrictive engulfment [r = .25, p = .13 (one-tailed)].

For men in the CBCT condition, decreases in negative attributions were

significantly associated with decreases in hostile withdrawal [$r = .66$, $p < .001$ (one-tailed)] and denigration [$r = .46$, $p = .01$ (one-tailed)] reported by the female about the male partner. Change in attributions was not related to change in the male use of domination/intimidation [$r = .06$, $p = .38$ (one-tailed)] or restrictive engulfment [$r = .16$, $p = .24$ (one-tailed)] as reported by the female partner.

Contrary to the hypothesis, a decrease in negative attributions about the partner for women in the UT condition was significantly associated with an *increase* in their use of domination/intimidation [$r = -.44$, $p = .02$ (one-tailed)] and denigration [$r = -.53$, $p = .004$ (one-tailed)] as reported by the male partner. Change in attributions was not related to change in the female use of hostile withdrawal [$r = -.30$, $p = .08$ (one-tailed)] or restrictive engulfment [$r = -.26$, $p = .10$ (one-tailed)], as reported by the male partner.

The analysis indicated that for men in the UT condition changes in attributions about the partner were not associated with changes in their use of psychological abuse as reported by the female partner: hostile withdrawal [$r = .15$, $p = .24$ (one-tailed)], domination/intimidation [$r = -.15$, $p = .24$ (one-tailed)], denigration [$r = -.06$, $p = .38$ (one-tailed)], and restrictive engulfment [$r = -.17$, $p = .20$ (one-tailed)].

Additional findings. While conducting Pearson's correlations exploring associations with changes in negative and positive communication behavior, additional correlations were reviewed to explore the reciprocity of behavior between interacting members of a couple. An increase in female positive communication behavior over the course of therapy was associated with an increase in male positive communication behavior for couples in the CBCT condition [$r = .82$, $p < .001$ (one-tailed)] and for couples in the UT condition [$r = .73$, $p < .001$ (one-tailed)]. Additionally, a decrease in

female negative communication behavior was significantly associated with a decrease in male negative communication behavior for couples in the CBCT condition [r = .58, p = .008 (one-tailed)] and for couples in the UT condition [r = .65, p = .002 (one-tailed)]. Although these substantial correlations cannot be interpreted as evidence of a reciprocal exchange of behavior between partners, they do indicate that changes in partners' communication behaviors co-varied.

Post-hoc analysis. Fisher *r*-to-*z* transformations were utilized to test the significance of the difference between two correlation coefficients, comparing corresponding correlation coefficients for relations between variables for the CBCT and UT conditions. One-tailed tests were used because it was expected that attributions would be more strongly related to behavior change in CBCT compared to UT.

No significant differences were found between the CBCT and UT correlation coefficients for female negative attribution change and relationship satisfaction change [z = -.48, p = .32 (one-tailed)] and for male negative attribution change and relationship satisfaction change [z = .82, p = .21 (one-tailed)].

No significant differences were found between the CBCT and UT correlation coefficients for female negative attribution change and positive communication change [z = -1.28, p = .10 (one-tailed)], male negative attribution change and positive communication change [z = .40, p = .34 (one-tailed)], and male negative attribution change and negative communication change [z = 1.17, p = .12 (one-tailed)]. A significant difference was found between the CBCT [r = .64, p = .003 (one-tailed)] and UT [r = .10, p = .35 (one-tailed)] correlation coefficients for female negative attribution change and negative communication change [z = 1.77, p = .04 (one-tailed)]. The post-hoc analysis of

the additional findings indicated no significant differences between the CBCT and UT correlation coefficients for female positive communication change and male positive communication change [$z = .59$, $p = .28$ (one-tailed)] and female negative communication change and male negative communication change [$z = -.32$, $p = .38$ (one-tailed)].

No significant difference was found between the CBCT and UT correlation coefficients for female change in negative attributions and female use of hostile withdrawal [$z = -.99$, $p = .16$ (one-tailed)] as reported by male partners. The correlation coefficients for the CBCT [$r = .11$, $p = .30$ (one-tailed)] and UT [$r = -.44$, $p = .02$ (one-tailed)] conditions were significantly different for the association between female change in negative attributions and female use of domination/intimidation [$z = 1.89$, $p = .029$ (one-tailed)]. The correlation coefficients for the CBCT [$r = .11$ $p = .31$ (one-tailed)] and UT [$r = -.53$, $p = .004$ (one-tailed)] conditions were significantly different for the association between female change in negative attributions and female use of denigration [$z = 2.27$, $p = .01$ (one-tailed)]. Additionally, there was a significant difference found between the CBCT [$r = .25$, $p = .13$ (one-tailed)] and UT [$r = -.26$, $p = .10$ (one-tailed)] conditions for female change in negative attributions and female use of restrictive engulfment [$z = 1.67$, $p = .05$ (one-tailed)] as reported by male partners. A significant difference was found between the CBCT [$r = .66$, $p < .001$ (one-tailed)] and UT [$r = .15$, $p = .24$ (one-tailed)] correlation coefficients for male change in negative attributions and male use of hostile withdrawal [$z = 2.1$, $p = .02$ (one-tailed)]. However, no significant differences were found between the CBCT and UT correlation coefficients for male change in negative attributions and male use of domination/intimidation [$z = -.27$, $p = .39$ (one-tailed)], denigration [$z = 1.42$, $p = .08$ (one-tailed)], and restrictive engulfment [$z =$

.06, p = .48 (one-tailed)].

CHAPTER 4

Discussion

Findings

On a broad level, the findings from the study are consistent with past research on couple therapy which suggests that conjoint therapy, regardless of theoretical orientation, is an effective intervention for distressed couples (Baucom, Shoham, Mueser, Daiuto, & Stickle, 1998; Shadish, Ragsdale, Glaser, & Montgomery, 1995). Women and men in both the CBCT and UT treatments reported increased relationship satisfaction and decreased negative attributions about their partner. Overall, couples were more satisfied in their relationships, and partners developed more realistic views of their partners' characteristics and roles in their relationship problems following 10 conjoint therapy sessions.

The strong association between increased relationship satisfaction and decreased negative attributions about the partner is consistent with prior findings from correlational, longitudinal, and outcome studies reviewed by Bradbury and Fincham (1990). Findings from the current study regarding this association cannot verify a temporal order of change, such that one changed prior to the other. Therefore, a causal link cannot be established. However, conjoint therapy appears to have a beneficial effect on relationship satisfaction and negative attributions, and these changes are related.

Additionally, couple therapy appears to be a viable treatment modality for deceasing psychological abuse for couples who present to treatment with ongoing psychological abuse and/or mild to moderate levels of physical abuse. Generally, the findings indicated that couples reported less psychological abuse in their relationship

following conjoint treatment targeting the risk factors for intimate partner violence and the prevention of intimate partner violence. Specifically, conjoint treatment seems to have an impact on the decreasing hostile withdrawal and denigration for women and men in both conditions. In addition, women in both conditions and men in the CBCT condition decreased their use of domination/intimidation, while men in the UT condition decreased their use of restrictive engulfment. Couple therapy is an appropriate and effective treatment modality to prevent the escalation of psychological abuse and to decrease the utilization of maladaptive conflict resolution tactics, such as controlling or threatening behaviors, among couples experiencing psychological abuse and/or mild to moderate levels of physical abuse.

Cognitive-behavioral theory postulates that change in cognitions influences change in behavior and vice versa (Epstein & Baucom, 2002). Additionally, the change is expected to be reciprocal, such that if cognitions are modified to be more realistic then behavior is expected to change in a positive direction as well. Even though the treatment in the UT condition did not utilize the cognitive-behavioral theoretical orientation as a guide for therapeutic intervention, a link between cognitive change and behavioral change was expected for couples in both conditions. The expectation that decreases in the utilization of psychological abuse would be associated with decreases in negative attributions received only partial support from the findings in the study. No relation was found between decreased negative attributions and decreased psychological abuse for women in the CBCT condition and men in the UT condition. For men in the CBCT condition, only a decrease in hostile withdrawal and denigration was associated with modified attributions.

In direct opposition to the hypothesized reciprocal nature of change in cognitions and behavior, the findings indicated a relationship between a decrease in negative attributions and an *increase* in the utilization of domination/intimidation and denigration by the female partners in the UT condition. One explanation for these contrary findings may be based in cognitive-behavioral theory. During interactions each partner processes and interprets the other's behaviors. Perhaps over the course of couple therapy the female partner's attributions shift such that she begins to view herself as having more input into the relationship as opposed to blaming her partner for relationship problems. If that type of cognitive shift occurs, she may become more active in pursuing change in the couple's relationship, and her male partner may view her new outlook and approach as more controlling and critical than before. Because psychological abuse was measured based on the partner's report of the person's behavior, the male partners may have reported an increase in these negative behaviors. The association between change in negative attributions and an increase in female use of psychological abuse was not found for couples in the CBCT condition. Perhaps this difference is due to the CBCT protocol stressing the accurate identification of maladaptive conflict resolution tactics and problematic ways of handling differences, such as insulting the partner when alone and in front of others or making demeaning comments about the partner's ability to perform his/her job. Therefore couples in the CBCT condition may be more likely to accurately label the partner's behavior and less likely to incorrectly identify the female partner's active pursuing change as controlling and critical. Important to consider in this interpretation, however, is that a temporal order between attribution change and psychological abuse change cannot be established.

Overall, couples within both treatment conditions reported expected increases in relationship satisfaction, decreases in negative attributions, and decreases in psychological abuse. However, contrary to the hypotheses, differences between treatment groups regarding a larger impact of CBCT than UT on change in negative attributions and decreases in psychological abuse did not manifest. In fact, females in the UT condition reported a larger decrease in their male partner's use of domination/intimidation compared to females in the CBCT condition. All other findings regarding differences between CBCT and UT in negative attribution and psychological abuse change indicated no differences in the effectiveness of the two treatment conditions. These findings offer additional support for the utilization of conjoint therapy, regardless of theoretical orientation, as a means to intervene with this population.

The role of cognitive change in the difference between treatment conditions in behavior change was explored when the findings indicated differences between groups. Therefore, the possible mediating role of attribution change in differences between groups for the decrease of male partner's use of domination/intimidation was explored. Findings suggested a trend toward attribution change playing a role in the larger impact of UT compared to CBCT on female reports of male domination/intimidation.

Negative and positive communication behaviors also were expected to change over the course of treatment. Based upon coded observation of the couples during a problem-solving interaction, women and men in the CBCT condition exhibited a significant decrease in their use of negative communication. However, negative communication behaviors of women and men in the UT condition did not decrease significantly. Additional findings indicated that CBCT had a larger impact on the

decrease of partner's negative behaviors compared to UT. In the case of females, the significant difference between CBCT and UT in negative communication change was not affected when considering female change in negative attributions. For males, however, the role of attribution change appeared stronger as evidenced by a trend toward cognitive change mediating the larger impact of CBCT than UT on change in negative communication.

Cognitive-behavioral theory implicates effective communication as an asset to successful relationship functioning. Therefore, the CAPP protocol for the CBCT condition includes behavioral interventions focused on decreasing forms of negative communication as well as targeting the acquisition of communication skills, such as active listening, paraphrasing, and empathic reflection, and problem-solving skills, such as clarification of the problem, proposing solutions, discussing alternatives, and making a plan to adopt the solution (Epstein & Baucom, 2002; LaTaillade, Epstein, & Werlinich, 2006). Couples in the CBCT condition were exposed to interventions directly targeting skills training, including alternatives to utilizing negative communication behaviors. Therefore, the finding that the CBCT condition more effectively decreased negative communication patterns among couples compared to the UT condition was consistent with the behavioral focus of CBCT.

Couples in the CBCT condition decreased their use of negative communication, but they did not demonstrate an increase in positive communication. Results indicated that positive communication behaviors did not increase significantly for couples in either condition. The results offer support to the conceptualization of negative and positive behaviors as distinct components of behavior, and decreasing negative behavior does not

necessarily lead to positive behaviors (Baucom, Epstein, & LaTaillade, 2002). Therefore, while couple therapists should focus on eliminating negative behaviors, clinicians should simultaneously develop positive behaviors to substitute in the place of negative behaviors. Couple therapists may spend much more time changing the distressing negative behaviors than on building positive behaviors. A direction for further research may be to code sessions for amount of time spent on building positive versus terminating negative behaviors.

Additionally, past research suggests that the occurrence of five positive behaviors is needed to combat the effects of one negative behavior in couple interactions (Gottman, 1993; Markman, Stanley, & Blumburg, 2001). Therefore, more therapeutic effort may be needed to effectively increase positive behavior compared to the intervention needed to decrease negative behavior. Another explanation may be a ceiling effect limiting the amount of change that could be detected for positive behavior, because in this study pre-treatment scores were fairly high and the scale for positive behavior has an upper limit value of 5.

When examining the link between cognitive change and behavioral change in the context of communication behavior, the findings were mixed. As expected, as negative attributions about the partner decreased, the utilization of negative communication behaviors for couples in the CBCT condition decreased. Thus, the findings for couples in the CBCT condition provide additional support for past research finding a correlation between maladaptive attributions and observed negative communication (Bradbury & Fincham, 1992). However, the association was not significant for couples in the UT condition. In CBCT, the cognitive change is assumed to be a mechanism for behavior

change, and therapists in CBCT explicitly work on that link during sessions, but in UT the presumed mechanism of behavior change may be different. The mechanisms of behavior change vary depending on the theoretical orientation of the usual treatment model. For example, in emotionally-focused couple therapy an individual's increased understanding and acceptance of the other partner's attachment injuries in past relationships, of the effects of these injuries on the current relationship, and of their emotional experience are the presumed mechanisms of behavior change. As another example, the modification of the internal structural organization of the couple relationship, such as the establishment of clear boundaries between the partners and between the couple and the external world, commonly induced through directives from the therapist, is the mechanism of behavior change in structural couple therapy. Therefore, different processes may have resulted in behavior changes in UT cases.

The reduction of negative attributions was found to be associated with an increase in positive communication for women in the CBCT condition, men in the UT condition, and approaching significance for men in the CBCT condition. Findings did not reveal an association between negative attributions and positive communication behavior for women in the UT condition. The results indicating a link between attribution change and positive communication behavior change for men in the UT condition and a lacking link for women in the UT condition are contrary to findings in past research indicating a stronger association between behavior and cognitions for women than men (Miller & Bradbury, 1995). However, the results for the CBCT group do support this past finding.

The additional findings from the post-hoc exploratory analyses added support to the cognitive-behavioral concept of reciprocity in couple relationships. Negative and

positive reciprocity refer to the mutual nature of interactions between partners, such that when one partner engages in negative or positive behavior there is a tendency for the other partner to respond in kind, negatively or positively. Members of couples in both conditions exhibited positive correlations between their changes in levels of positive communication behavior and between their changes in levels of negative communication behavior. Decreased female negative communication behavior was associated with decreased male negative communication behavior, and increased female positive communication behavior was associated with increased male positive communication behavior. As noted earlier, these associations do not directly identify reciprocal exchanges between partners, but the high levels of association between partners' behavioral changes suggest that their changes over the course of therapy occur in at least a parallel manner, if not causally linked.

In sum, structured cognitive-behavioral couple therapy and conjoint therapy from a variety of systems theoretical orientations are effective and appropriate interventions for couples experiencing psychological abuse and/or mild to moderate levels of physical abuse. Even with a fairly small sample size, couples completing conjoint therapy, regardless of theoretical orientation, have demonstrated improved outcomes.

Limitations of the Study

As a randomized treatment outcome study of couple therapy, this study has several limitations to consider. Random assignment of couples to treatment group protects the study against threats to internal validity. However, the methodology does not protect the study from threats to external validity. First, given that the sample consists of a clinical population of couples seeking therapeutic services, the results can only be

applied to couples who present voluntarily to therapy. To the extent that couples who seek treatment can be assumed to be motivated to improve their relationships, the findings of this study cannot be generalized to couples who experience abusive behavior or relationship distress but have not sought assistance. Additionally, all of the participants in the study reported psychological abuse and/or mild to moderate levels of physical abuse in their couple relationships. Therefore, the findings cannot be generalized to couples reporting severe levels of intimate partner violence or couples reporting an absence of intimate partner violence. Conjoint couple therapy, in which both partners are involved in treatment, is not advisable for couples experiencing severe forms of intimate partner violence (Holtzworth-Munroe, Meehan, Rehman, & Marshall, 2002), and therefore the treatment conditions studied should not be applied to the more violent population. Couples reporting an absence of intimate partner violence may benefit from conjoint therapy, however the extent to which the studied treatments would modify attributions, communication behaviors, and relationship satisfaction and prevent psychological abuse among this population remains unclear based on the findings from the study.

A second limitation of the study is the volunteer status of participating couples. There may exist differences between couples who chose participation and couples who declined to participate in the research study but chose to receive couple therapy at the Center for Healthy Families outside of the study protocol. However these differences were not examined. Additionally, attrition of couples after volunteering to participate in the study serves as a limitation. There may be undetected differences between those couples completing the assessments and 10 therapy sessions and those couples dropping

out of the study prior to completion. For example, couples terminating therapy prior to completion may have experienced more severe relationship distress and problems to be addressed therapeutically, causing these couples to abandon therapy as a helpful option in the early stages. The treatments may have had differential effects on couples completing the therapy compared to couples dropping out. However these differences were not examined in this study.

The type of control group, a standard treatment control group in which the couples who are randomly assigned to the control condition receive therapeutic intervention, initially may be considered another limitation. Because couples in the CBCT and the UT conditions receive therapy targeting the prevention and reduction of intimate partner violence, the researchers are unable to rule out the effects of non-specific factors of therapy as active ingredients in treatments, which may result in similar outcomes in the two treatments. These non-specific factors include, but are not limited to, empathy and validation from the therapists. However, an extensive history of efficacy research on behavioral couple therapy with waitlist control groups indicates that couples on the waitlist generally make no improvement and that the effect size for behavioral couple therapy is rather large. Because of these findings, researchers recommend the use of standard treatment control groups to avoid the ethical dilemma of withholding treatment from distressed couples (Baucom, Hahlweg, & Kuschel, 2003). The current study utilizes the ethically and methodologically sound standard treatment control group.

The study lacks an independent variable manipulation check needed to determine implementation of the CBCT and UT treatments, to ensure that treatments were administered as expected and certain aspects are mutually exclusive. For example, the

materials utilized in the CBCT condition to teach communication skills should not be a part of treatment in the UT condition. An independent variable manipulation check would provide confidence that the expected distinguishing characteristics between the two conditions transpired.

Aside from the limitations accompanying a randomized clinical trial, other limitations involve the measurement tools. Although one of the strengths of the study is the use of multiple methods of garnering data, the use of self-report questionnaires is subject to social desirability reporting bias. The inclusion and exclusion criteria are based upon the completion of questionnaires and, therefore, rely upon subjective accounts from each partner. Couples may have been excluded because the partners chose not to report psychological and/or physical abuse, or were unable to recognize the maladaptive conflict resolution tactics to be reported. However, the self-report measures utilized in the study, although subject to scrutiny, have been methodologically validated to be utilized as measurements for the independent and dependent variables and have been used in many prior studies.

Another measurement limitation is the exploration of only one type of cognition: attributions. Prior research suggests exploring different types of cognitions, such as expectancies, when studying the relationship between attributions and marital satisfaction (Fincham, Harold, & Gano-Phillips, 2000). Most couple research has focused on attributions; however other cognitions may be modified by the interventions in the CBCT and UT conditions and may be associated with behavior change. Additionally, while negative behavior was measured both though observation (MICS-G) and self-report (MMEA), positive behavior was only measured though observation (MICS-G).

A threat to statistical conclusion validity is the small sample size which contributes to low statistical power. Statistical power refers to the ability of the study to detect a difference between CBCT and UT when the difference truly exists. Several of the results examining differences between CBCT and UT were insignificant, which may be due to insufficient power. A recognition and consideration of these limitations is important when interpreting the results of the study. Nevertheless, the substantial number of significant effects from the analyses in spite of the limited power suggests that overall the effectiveness of couple therapies for abusive behavior and relationship distress was robust in this study.

Implications

Implications for theory. Cognitive-behavioral theory postulates that problematic couple interactions arise due to faulty cognitions and dysfunctional behaviors. Therefore, treatment based on the cognitive-behavioral model directly targets the modification of faulty cognitions and problematic behaviors to alter the nature of the dysfunctional relationship. Based on findings from the study, the treatment package based upon cognitive-behavioral theory, including skills training and cognitive restructuring techniques, is effective in modifying negative attributions about the partner. Not contrary to the cognitive-behavioral theory, interventions from other systems theories, such as reframing and externalization in UT, altered negative attributions about the partner. The cognitive-behavioral emphasis on targeting cognitions is supported, since couples receiving CBCT, which overtly targets cognitive change, and UT, which covertly targets cognitive change, reported increases in relationship satisfaction.

Along with the cognitive-behavioral emphasis on cognitive change is change in

dysfunctional behaviors, such as decreasing negative communication, increasing positive communication, and decreasing psychological abuse. Findings offer support for the cognitive-behavioral model's emphasis on decreasing negative communication and psychological abuse, since the cognitive-behavioral treatment package effectively deceased negative behavior. However, positive communication behavior did not increase for couples. Despite the lack of positive behavior increase, relationship satisfaction among couples increased and the use of negative behaviors decreased. Theoretically, the substitution of positive behavior for negative behavior is ideal, but results suggest this had not happened in the interactions of the participating couples. An emphasis should be placed on exploring positive and negative behaviors as different aspects influencing couple interactions.

Cognitive-behavioral theory emphasizes the inextricable link among cognitions, behaviors, and emotions, such that change in one is expected to lead to change in another. Empirical support for this tenet from the findings includes the relationship between negative attribution change and negative communication change, such that modified attributions are related to less negative communication. Additional support includes the link between decreased negative attributions about the partner and increased positive communication behavior. When exploring the relationship between cognitive change and behavioral change, in the case of psychological abuse as reported by the partner, the inextricable link between cognitions and behaviors may be questioned. Decreases of negative attributions were not associated with decreases in psychological abuse, suggesting that attribution change may be related to some specific types of behavior and not as closely related to others.

Exploration of the mediating role of cognitive change in the different impacts of treatment groups on behavior change only provides weak support for the link between attribution change and negative communication change for men, and attribution change and domination/intimidation change for men. A small sample size may prohibit the current study from detecting the influence of cognitive change on differences in behavior change.

Consistent with the cognitive-behavioral concept of reciprocity, correlated changes in both positive and negative behaviors between partners manifested in couples' interactions. Female decreases in negative communication were associated with male decreases in negative communication, and female increases in positive communication were associated with male increases in positive communication. Empirical support for the concept of reciprocity emphasizes cyclical interactions of the couple as a system in which change in one partner enacts change in another. Although the present study did not permit a direct examination of such a process, the results suggest that future research should attempt to measure it.

Implications for research. The current study provides empirical support for the effective and appropriate use of conjoint therapy for couples experiencing psychological abuse and/or mild to moderate levels of physical abuse. Most research on the treatment of couples experiencing intimate partner violence focuses on individual or group intervention to ensure safety. The current study adds to the empirical literature by suggesting conjoint therapy as another treatment modality. The maintenance of safety remains important to the conjoint form of therapeutic intervention. Therefore, after extensive assessment of intimate partner violence, couples involved in the CAPP program

are a specialized population: couples experiencing psychological abuse and/or mild to moderate levels of physical abuse. Additional treatment outcome research is needed to confirm the beneficial outcomes of conjoint therapy, regardless of theoretical orientation, for this specialized population.

To improve upon the current treatment outcome study, future research should include larger sample sizes in an effort to increase confidence in the findings and ensure differences between types of treatment can be detected due to higher statistical power. Concerning the exploration of differences between conjoint treatments from different theoretical orientations, future research may define the theoretical orientation of the control group or several control groups for comparison. One reason cited for minimal outcome differences among differing models of conjoint treatment is the lack of matching the couple's therapeutic issues to the therapeutic model (Baucom et al., 1998). However, since the treatments in the study and follow-up studies will focus primarily on the therapeutic issue of the reduction of intimate partner violence, differences between treatments may arise. Perhaps one treatment model is better for treating couples experiencing psychological abuse and/or mild to moderate levels of physical abuse than others.

Consideration of the limitations of the current study should direct future research on the impact of conjoint therapy on relationship satisfaction, attributions about the partner, communication behavior, and psychological abuse. The current study focused on the modification of negative attributions about the partner. However, future research should explore the modification of different types of cognitions to depict a comprehensive understanding of the impact of cognitive restructuring interventions on

cognitive change. The study of the change of other cognitions also informs the relationship between cognitive change and behavioral change.

Further research is necessary to explore current findings that were contrary to the hypotheses. Again, larger sample sizes would increase statistical power, increasing the likelihood of finding differences between treatment groups if they exist. Additionally, the lack of increase of positive communication among couples and the lack of a relationship between attribution change and psychological abuse change should be clarified by future research in an effort to inform theory and clinical intervention.

Finally, the findings can only be generalized to the treatment package of 10 sessions in the CBCT structured protocol or in UT. Therefore, future research may explore the effect of specific interventions within each treatment condition on outcomes, such as relationship satisfaction, attributions, communication, and psychological abuse to provide a finer analysis of the change agents in conjoint therapy.

Implications for clinical practice. The Couples Abuse Prevention Program (CAPP) is a couple-based intervention designed to prevent and reduce intimate partner violence. Preliminary support for the structured cognitive-behavioral couple treatment (CBCT) and the treatment as usual from a variety of systems theoretical orientations (UT) suggests that conjoint treatment is an effective treatment modality for couples experiencing psychological abuse and/or mild to moderate physical abuse. Conjoint therapy may be used by clinicians as a viable treatment modality for the prevention or treatment of intimate partner violence after ensuring safety through extensive assessment of the levels of intimate partner violence. Although group and individualized interventions may be appropriate for couples experiencing severe levels of intimate

partner violence, conjoint interventions may be appropriate for lower levels of intimate partner violence. Couple therapy provides a safe environment for the couple to work together on decreasing the intimate partner violence and other relationship concerns. An additional benefit of conjoint therapy is the therapist's ability to assess the interaction processes that define the couple relationship and to directly intervene in these negative interaction cycles to enact change, a strategy that is not available in group and individualized treatment modalities.

This study aimed to provide empirical support for clinical interventions targeting cognitive restructuring in conjoint therapy, specifically with the goal of modifying negative attributions. Although the results cannot attest to which techniques caused the modification of cognitions, interventions based on a cognitive-behavioral orientation, such as eliciting alternatives for the partner's behavior and asking the partner to explain personal intent, and interventions based in other family systems theoretical orientations, such as reframing and externalization of the problem, appear to have an impact on decreasing negative attributions about the partner.

Couple therapy, regardless of the theoretical orientation guiding the intervention, is an effective treatment modality for increasing relationship satisfaction, decreasing negative communication, and decreasing psychological abuse. Therapists may consider the use of the CAPP protocol or other systems models of couple therapy in the planning of their interventions.

Although conjoint therapy appears to be effective in decreasing negative behaviors such as negative communication and psychological abuse, the forms of conjoint therapy used in the present study did not appear to increase couples' positive

behaviors, such as positive communication between partners. When intervening with couples experiencing psychological and/or mild to moderate physical abuse, therapists may be tempted to focus primarily on decreasing the negative interactions, with less of an emphasis on building partners' positive interactions. Understandably, attention to the decrease in abusive behavior is necessary. However, this needed focus on decreasing the negative does not eliminate the need or capability for building positive behaviors in treatment. The CAPP protocol may be enhanced by emphasizing a focus on increasing positive behavior earlier in the program, in addition to the focus on decreasing negative behaviors. For example, the CAPP protocol may better target an increase in positive communication by including the couple's practice of communication skills using positive topics in their relationship, such as a shared interest or an aspect of the relationship that they enjoy, instead of relying solely on the practice of skills to communicate negative emotions and discuss topics of conflict in the relationship. An emphasis should be placed on finding techniques to foster the development of positive interactions between partners in- and out-of-session, in addition to decreasing the negative.

The couple-based intervention's goal of decreasing abuse has been achieved to a considerable degree across treatment modalities, indicating the importance of preventative intervention for couples who are experiencing psychological abuse and/or mild to moderate levels of physical abuse. Clinical experience and prior research suggests that psychological abuse often escalates into physical violence in couples' interactions (Murphy & O'Leary, 1989). Therefore, a preventative stance toward intervention for intimate partner violence is most beneficial to couples. Therapists can intervene with couples prior to the incidence of physical violence by targeting risk factors of abuse, such

as negative attributions about the partner, negative communication patterns, and psychological abuse.

Appendices

Appendix A

Demographic Questions

A. Gender: M F

B. Age (in years):_____

C. Relationship status to person in couple's therapy with you:

1. Currently married, living together
2. Currently married, separated
3. Divorced
4. Living together, not married
5. Separated, not married
6. Dating, not living together

D. Years together_____

E. Personal yearly gross income: $_____

F. Race:

1. Native American
2. African American
3. Asian/Pacific Islander
4. Hispanic
5. White
6. Other (specify)_____

G. Highest level of education completed

1. Some high school
2. High school diploma
3. Some college
4. Associate degree
5. Bachelors degree
6. Some graduate education
7. Masters degree
8. Doctoral degree
9. Trade school

Appendix B

Marital Attitude Survey Subscale Items

Attributions of Causality to Partner's Behavior

7. If my partner did things differently we'd get along better.
14. The way my partner treats me determines how well we get along.
15. Whatever problems we have are caused by the things my partner says and does.
30. The things my partner says and does aren't the cause of whatever problems come up between us (reverse scored).

Attributions of Causality to Partner's Personality

5. Even if my partner's personality changed we still wouldn't get along any better (revered scored).
8. My partner's personality would have to change for us to get along better.
12. I don't think our marriage would be better if my partner was a different type of person (reverse scored).
16. My partner and I would get along better if it weren't for the type of person he/she is.

Attributions of Malicious Intent to Partner

2. My partner doesn't seem to do things just to bother me (reverse scored).
4. My partner intentionally does things to irritate me.
6. It seems as though my partner deliberately provokes me.
17. My partner doesn't intentionally try to upset me (reverse scored).
24. I'm sure that my partner sometimes does things just to bother me (reverse scored).

26. I think my partner upsets me on purpose.

28. I'm certain that my partner doesn't provoke me on purpose (reverse scored).

Attribution of Lack of Love of Partner

1. When we aren't getting along I wonder if my partner loves me.

18. When things aren't going well between us I feel like my partner doesn't love me.

20. What difficulties we have don't lead me to doubt my partner's love for me (reverse scored).

21. When things are rough between us it shows that my partner doesn't love me.

25. Even when we aren't getting along, I don't question whether my partner loves me (reverse scored).

27. When my partner isn't nice to me I feel like he/she doesn't love me.

29. Even when we have problems I don't doubt my partner's love for me (reverse scored).

Appendix C

Dyadic Adjustment Scale

Most persons have disagreements in their relationship. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list. Place a checkmark (√) to indicate your answer.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
Handling family finances						
Matters of recreation						
Religious matters						
Demonstrations of affection						
Friends						
Sex relations						
Conventionality (correct or proper behavior)						
Philosophy of life						
Ways of dealing with parents and in-laws						
Aims, goals, and things believed important						
Amount of time spent together						
Making major decisions						
Household tasks						
Leisure time interests and activities						
Career decisions						

	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
How often do you discuss or have you considered divorce, separation or terminating your relationship?						
How often do you or your partner leave the house after a fight?						
In general, how often do you think that things between you and your partner are going well?						
Do you confide in your partner?						
Do you ever regret that you married (or lived together)?						
How often do you or your partner quarrel?						
How often do you and your partner “get on each others’ nerves”?						

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

- Do you kiss your partner? EVERYDAY ALMOST EVERYDAY OCCASIONALLY RARELY NEVER
- Do you and your partner engage in outside interests together?

  ALL OF THEM MOST OF THEM SOME OF THEM VERY FEW OF THEM NONE OF THEM
- Have a stimulating exchange of ideas?

NEVER LESS THAN ONCE A MONTH ONCE OR TWICE A MONTH ONCE OR TWICE A WEEK ONCE A DAY MORE OFTEN

- Laugh together?

NEVER LESS THAN ONCE A MONTH ONCE OR TWICE A MONTH ONCE OR TWICE A WEEK ONCE A DAY MORE OFTEN

- Calmly discuss something?

NEVER LESS THAN ONCE A MONTH ONCE OR TWICE A MONTH ONCE OR TWICE A WEEK ONCE A DAY MORE OFTEN

- Work together on a project?

NEVER LESS THAN ONCE A MONTH ONCE OR TWICE A MONTH ONCE OR TWICE A WEEK ONCE A DAY MORE OFTEN

These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below causes differences of opinion or have been problems in your relationship during the past few weeks. Check "yes" or "no."

Being too tired for sex. Yes ___ No____

Not showing love. Yes ___ No____

The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree of happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship.

. . . . . .

EXTREMELY UNHAPPY FAIRLY UNHAPPY A LITTLE UNHAPPY HAPPY VERY HAPPY EXTREMELY HAPPY PERFECT

Which of the following statements best describes how you feel about the future of your relationship? Check the statement that best applies to you.

6. I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
5. I want very much for my relationship to succeed, and will do all I can to see that it does.
4. I want very much for my relationship to succeed, and will do my fair share to see that it does.
3. It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.
2. It would be nice if my relationship succeeded, but I refuse to do any more than I am doing now to keep the relationship going.

1. My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Appendix D

Multidimensional Measure of Emotional Abuse Subscale Items

Restrictive Engulfment

1. Asked the other person where s/he had been or who s/he was with in a suspicious manner.
2. Secretly searched through the other person's belongings.
3. Tried to stop the other person from seeing certain friends or family members.
4. Complained that the other person spends too much time with friends.
5. Got angry because the other person went somewhere without telling him/her.
6. Tried to make the other person feel guilty for not spending enough time together.
7. Checked up on the other person by asking friends where s/he was or who s/he was with.

Denigration

8. Said or implied that the other person was stupid.
9. Called the other person worthless.
10. Called the other person ugly.
11. Criticized the other person's appearance.
12. Called the other person a loser, failure, or similar term.
13. Belittled the other person in front of other people.
14. Said that someone else would be a better girlfriend or boyfriend.

Hostile Withdrawal

15. Became so angry that s/he was unable or unwilling to talk.

16. Acted cold or distant when angry.

17. Refused to have any discussion of a problem.

18. Changed the subject on purpose when the other person was trying to discuss a problem.

19. Refused to acknowledge a problem that the other felt was important.

20. Sulked or refused to talk about an issue.

21. Intentionally avoided the other person during a conflict or disagreement.

Domination/Intimidation

22. Became angry enough to frighten the other person.

23. Put her/his face right in front of the other person's face to make a point more forcefully.

24. Threatened to hit the other person.

25. Threaten to throw something at the other person.

26. Threw, smashed, hit, or kicked something in front of the other person.

27. Drove recklessly to frighten the other person.

28. Stood or hovered over the other person during a conflict or disagreement.

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