#### ABSTRACT

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PSYCHOPATHOLOGICAL SYMPTOMS AND RELATIONSHIP SATISFACTION: DIRECT EFFECT AND MEDIATION THROUGH PARTNER COGNITIONS

Janey E. Cunningham Master of Science, 2007

Directed By: Professor Norman B. Epstein, Ph.D.

Department of Family Studies

Previous research has identified links between psychopathological symptoms and levels of satisfaction within couple relationships. Findings have shown associations between low levels of relationship satisfaction and depressive and neurotic symptoms. However, the process or mechanism through which an individual's psychopathology and the couple's relationship problems are linked has yet to be determined. The purpose of this study was to examine the degree to which psychopathological symptoms are directly related to the level of relationship satisfaction for each partner in the relationship. It also explored the degree to which the relation between psychopathology and relationship distress is mediated by partners' cognitions about each other that are associate with relationship conflict. The study involved secondary analysis of a sample of 83 couples. Findings did not support current literature that psychopathological symptoms directly affect relationship satisfaction. Gender differences were found in the association between psychopathological symptoms and cognitions.

# THE ASSOCIATION BETWEEN PSYCHOPATHOLOGICAL SYMPTOMS AND RELATIONSHIP SATISFACTION: DIRECT EFFECT AND MEDIATION THROUGH PARTNER COGNITIONS

By

Janey E. Cunningham

Thesis submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Master of Science

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Advisory Committee: Professor Norman Epstein, Ph.D., Chair Professor Carol Werlinich, Ph.D. Professor Jaslean LaTaillade, Ph.D. © Copyright by Janey E. Cunningham 2007

## Dedication

I would like to dedicate my thesis to my very dear Grandma, Janey Mooney, who recently passed away in September, 2006. She embodied the qualities, values, morals, and strength of character for which I strive in my life. She encouraged me in my pursuit of my master's degree even though it meant that I would be far away in her aging years. Her passion for life, quest for life-long learning, and unconditional love will stay with me always.

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## Chapter 1: Introduction

#### Statement of the Problem

In recent years, the number of studies examining the presence of various mental illnesses and how they affect relationships has increased. Not surprisingly, researchers are finding significant correlations between mental illness and distress in couple relationships (Coyne, Thompson, & Palmer, 2002; Hickey, Carr, Dooley, Guerin, Butler, & Fitzpatrick, 2005; Jackman-Cram, Dobson, & Martin, 2006). Studies have focused on depression, anxiety, bipolar disorders, and schizophrenia with respect to the symptoms experienced by the identified patient and how they are associated with the quality of the individual's couple and/or family relationships in general. In spite of growing recognition of the degree to which partners' subjective cognitions about events in their relationship influence satisfaction (Heene, Buysse, & van Oost, 2005; Hooley & Teasdale, 1989), there has been limited research on how cognitions may mediate the relation between psychopathological symptoms and relationship quality. Furthermore, previous literature has focused on one type of mental illness, whereas this study will look at psychopathological symptoms in general terms and how they affect the quality of the relationship.

Previous research has identified direct links between psychopathological symptoms and levels of satisfaction within couple relationships. Findings have shown associations between low levels of relationship satisfaction and depressive and neurotic symptoms (Croake & Kelly, 2002; Eng & Heimberg, 2006; Jackman-Cram, Dobson, & Martin, 2006; Snyder & Whisman, 2003). However, the significant association that has

been found between relationship distress and psychopathological symptoms does not necessarily denote causality, especially because the studies have for the most part been correlational. It is difficult to prove causality between relationship distress and psychopathological symptoms considering the relationship likely is bidirectional, meaning that symptoms can lead to relationship distress and conversely, marital distress can lead to an increase in psychopathological symptoms (Whisman, 1999). Researchers also are interested in exploring the influence of various third variables that are affecting this association, such as partners' cognitions and communication patterns, to name a few. For example, researchers have found evidence that depressed partners attribute causes of negative events within their couple relationship to factors in their non-symptomatic partners (Heene, Buysse, & van Oost, 2005; Jackman-Cram, Dobson, & Martin, 2006). Furthermore, the degree to which the symptomatic individual perceives that the significant other is critical of his or her behavior/symptoms negatively affects the individual's overall level of functioning (Hooley & Teasdale, 1998). Perceived criticism reflects the symptomatic person's negative interpretations of their partner's communication as being critical or judgmental.

#### Purpose

Although research indicates that there is a link between an individual's psychopathology and the couple's relationship problems, the findings regarding the process or mechanism involved in this link are extremely limited. Cognitions (in particular, attributions that partners make about each other) as mediators and moderators of the relation between psychopathology and relationship satisfaction have been studied previously to some extent (Heene et al., 2005). However, the purpose of this study was to

more fully examine the degree to which the association between psychopathology and relationship satisfaction is mediated by the symptomatic and non-symptomatic partners' cognitions about their relationship problems. Both attributions and other types of streamof-consciousness "automatic thoughts" that partners experience during conflict were examined as possible mediating cognitions. Previous studies such as that by Heene et al. (2005) have only focused on one type or condition of psychopathology; e.g., depression. This study broadens the scope by examining a variety of psychopathological symptoms. In addition to testing hypotheses regarding the associations among psychopathological symptoms, partners' cognitions, and relationship satisfaction, this study poses research questions focusing on potential gender differences in those associations. Understanding the impact that cognitions have on relationship interactions will assist the therapeutic community in identifying the factors influencing overall satisfaction when psychopathological symptoms are present in a couple's relationship. This study also contributes to the current body of knowledge that focuses on the mediators between psychopathological symptoms and relationship satisfaction.

The sample that was used to investigate this topic was couples who had sought assistance for relationship problems at a university-based couple and family therapy clinic who were screened into a larger ongoing study of couple treatments for physical and psychological abuse. Consequently, this study investigated the link between psychopathology and relationship distress among clinical couples who have exhibited difficulties in constructively resolving conflicts in their relationships, using secondary analyses of existing data.

#### Theory

Based on symbolic interactional social theory (Ingoldbsy, Smith, & Miller, 2004; Winton, 1995), this study tested whether each partner's cognitions about the other's behavior mediate the relation between psychopathological symptoms and the overall level of partners' satisfaction with their relationship. The symbolic interactional model views the individual as the foundation of society, a microanalysis of interpersonal interaction (Winton, 1995). Based on the assumption that collectively individuals create society, these social groups have been described "as a collectivity of people who share common definitions of objects and events in their environment" (Winton, 1995, p.137). The model explores the social process of society from the perspective of the individual's interpretation, which in the context of the present study fits well with the focus on how the individuals' cognitions can influence and affect the interactions within the couple dyad, both positively and negatively. The symbolic interactional model views selfconcept and self-perception as the driving forces behind people's exploration of success and determination, allowing them to carve out their patterns of living. The lives that people create are symbolic of how they perceive their own ideals and personal potential versus these being imposed upon them by external forces of social structure. Instead of people being controlled by external morals and rules, they create their existence based on internal beliefs. For the purpose of this study, partners' symbolic interpretations of each other's behavior were explored as they affect the relation between psychopathological symptoms and partners' overall relationship satisfaction level.

Interpretations of each other's behavior take on symbolic meaning for the partners in a relationship, producing idiosyncratic reactions to each other. For example, in relationships where one of the partners is exhibiting psychopathological symptoms, how the symptoms are viewed and how they are interpreted become part of the symbols or patterns that make up the relationship. The present study explored how partners' symbols about each other affect their levels of relationship satisfaction.

One of the central premises of symbolic interaction theory is symbols and how people interpret and act on them. In the words of Ingoldsby, Smith and Miller (2004), symbolic-interactionalism is the "idea that we understand and relate to our environment based on the symbols that we know or those that we learn" (p.84). The unique characteristic of symbols is the capability of taking on multiple meanings. A good example of symbols is language. Language contains words that serve to communicate thoughts and feelings. People then associate meanings with those words and act accordingly. The same set of words can take on different meaning for different people in different settings, because the interpretation is always based on idiosyncratic personal perception. In a relationship, the words that partners use come to represent the cognitions that they hold about each other. In the present study, individuals' expressed cognitions about each other were explored to see if they mediate between psychopathological symptoms and relationship satisfaction.

#### *Review of Literature*

As mentioned previously, studies have shown correlations between psychopathological symptoms and levels of couple satisfaction. Available research has focused on specific conditions such as depression, agoraphobia, panic disorder, bipolar

condition, and schizophrenia among others. This review first focuses on studies that have explored the direct association between various psychopathological conditions (i.e., depression, anxiety, schizophrenia) and relationship satisfaction. These studies also are examined in terms of the degree to which they offer any information about the causal direction between psychopathology and relationship quality. Next, this review considers studies that have looked at potential mediators that further explain the correlation between psychopathological symptoms and the level of couple satisfaction. Possible mediators that have been studied include cognitions (e.g., partners' attributions) and partners' attachment styles. The final section of the literature review considers studies that have explored gender differences that may exist in the association between psychopathological symptoms and relationship satisfaction.

Direct Association: Depression & Relationship Satisfaction

Studies that explored the direct relationship between psychopathology and relationship satisfaction have produced a body of both consistent results and some unexpected ones. One of the consistent findings is the strong association between marital distress and depression (Beach, Sandeen, & O'Leary, 1990; Coyne, Thompson, & Palmer, 2002; Crowe, 2004; Forsterling, Schuster, & Morgenstern, 2005; Jeglic, Pepper, & Ryabchenko, 2005). Studies show that when one partner suffers from depression, the other partner is likely to experience distress regarding the relationship and also to be at greater risk for exhibiting depressive symptoms themselves (Heene, Buysse, & van Oost, 2005; Hicky et al., 2005; Uebelecker & Whisman, 2005). Furthermore, Coyne et al. (2002) found that not only were the partners of depressed patients more psychologically distressed, but they also were not sharing as many affectionate interactions as non-

depressed community couples do. Furthermore, in a study conducted by Schmaling and Jacobson (1990), where 126 couples participated in pretreatment assessment following the wives' seeking therapy for depression, it was found that dysfunctional interactions mediated the association between marital distress and depressive symptoms. This suggests that marital distress may elicit a couple's dysfunctional interactions, which in turn elicit partners' depression, although it also is possible that depression symptoms in one or both partners may elicit negative couple interactions, which in turn elicit relationship distress.

Direct Association: Anxiety & Relationship Distress

Findings regarding the association between anxiety and relationship distress have been less consistent than those concerning depression. Personal interpretations and attributions about the symptoms of anxiety have been shown to differ between the identified patient exhibiting the symptoms and friends or partners (Eldridge-Randall, 1998; Eng & Heimberg, 2006; McLeod, 1994). In one study conducted by Eng and Heimberg (2006), 48 undergraduate students who met criteria for generalized anxiety disorder (GAD) and self-reported on problems in their relationships were recruited along with 53 students who did not self-report GAD symptoms for a control group. These participants were then asked to invite a "close friend" to complete an assessment packet. It was found that friends of participants with anxiety did not attribute problems in their relationship to the symptoms of the friend who reported GAD as much as the individual with the anxiety did (Eng & Heimberg, 2006). It was also found that friends of participants with GAD experienced the quality of the friendship the same as friends of members of the control group, meaning that the friends of participants who reported

symptoms of GAD did not attribute relationship distress as a cause of the symptoms (Eng & Heimberg, 2006).

In another study including spouses diagnosed with Generalized Anxiety Disorder (GAD; Dutton, 2001), researchers recruited couples through an outpatient health clinic in a large military hospital. A total of 23 couples participated in the study. Results showed that female spouses diagnosed with GAD perceived marital maladjustment more than male spouses with GAD, a finding that seems consistent with common results of couple studies indicating that females report more relationship distress than do males. Dutton (2001) noted that in terms of level of relationship distress, GAD couples occupy a middle ground, consistent with findings of other studies in which couples where one partner experiences anxiety are not as distressed compared to couples experiencing other psychopathological symptoms such as depression or schizophrenia (Hickey, Carr, Dooley, Guerin, Butler, & Fitzpatrick, 2005; Jackman-Cram, Dobson, & Martin, 2006). Dutton also found that when women reported having GAD symptoms, mutual avoidance was the couples' most common method of dealing with disagreements in their relationship, in contrast to the female demand/ male withdraw pattern commonly found in distressed couples (Johnson & Denton, 2002).

Direct Association: Schizophrenia & Bipolar Conditions and Relationship Quality

The association between couple and family relationship quality and mental

illnesses that involve more severe psychopathologic symptoms, such as schizophrenia

and bipolar disorder, has also been explored. One study examined the relationship

between a spouse's critical comments and the partner's level of bipolar symptoms

(Greene, 1998). Researchers recruited 39 couples through advertising at New York

Hospital, Cornell Medical Center, based on one of the partners having a bipolar disorder diagnosis. Couples were randomly assigned the patients to treatment with (a) a mood stabilizer medication and cognitive behavioral therapy or (b) a mood stabilizer alone. It was found that patients who experienced more general distress attributed the cause of their stress to their partner. When the attributions were reviewed for content, it was found that spouses rarely referred to their illness in attributing responsibility for negative life events. However, there was no correlation between the spouse's critical comments and the identified partner's level of symptoms, meaning that even though both partners attributed the stress within their relationship to each other, critical comments that occurred between them did not directly affect their level of satisfaction with their relationship.

In a study by Croake and Kelly (2002) conducted in an outpatient treatment center of a Veterans Administration medical center, 33 men diagnosed with schizophrenia and 35 diagnosed with bipolar disorder participated in research on Adlerian-style psychoeducational couples group therapy along with their wives. Changes were produced over the course of study in both the patients and their wives in their reported marital adjustment as related to the degree of psychopathological symptoms. The researchers found that partners' daily positive encouragement of each other in the form of compliments and gratitude produced positive results in the quality of the marital relationship in both groups of couples (where one partner was diagnosed with schizophrenia and where one partner was diagnosed with bipolar disorder). Men with schizophrenia showed the least amount of improvement in marital adjustment and failed to hold treatment gains in the three-month follow-up. However, none of the patients were

hospitalized during the year following treatment. These findings suggest the potential positive impact that a more structured and less stressful pattern of daily life could have on an individual diagnosed with schizophrenia or bipolar disorder. Ultimately, this would increase both the marital adjustment and relationship satisfaction for both partners.

Mediators of the Association between Psychopathological Symptoms & Couple Satisfaction

The consistent correlation between psychopathological symptoms and marital satisfaction has encouraged researchers to look at potential mediators of that association. It has been difficult to identify the causal relationship between marital dissatisfaction and symptoms because the process likely is bidirectional; the psychopathological symptoms can cause marital distress and marital distress can exacerbate psychopathological symptoms. Because psychopathological and relationship distress co-occur so much, identifying processes underlying the association would provide key targets for therapeutic interventions to improve both problems. Examples of potential mediators are partners' cognitions about their relationship (e.g., attributions), comorbid or co-existing disorders, and attachment styles. Studies have produced mixed results, which are identified in the following review.

Attributions are a form of cognition in which an individual makes an inference from an observed event to an underlying unobserved determinant of that event. In couple relationships, individuals commonly make attributions about factors influencing their own and their partners' actions (Epstein & Baucom, 2002). Attributions or inferences explaining behavior reflect the subjective perspective of partners in the relationship.

When partners respond to their partners' behaviors, attributions influence both how they

feel and react to their partner. Distressed couples tend to attribute negative events to trait-like characteristics in their partner that are unchangeable. Distressed couples are also more likely to attribute positive events to factors outside of the relationship, thus minimizing potential positive interactions between the partners (Epstein & Baucom, 2002). In couples where one partner has psychopathological symptoms, it is important for both partners to understand what attributions are being made about the symptomatic individual and the psychopathological symptoms. Researchers have looked at the impact that attributions have on the couple relationship and how it affects overall couple satisfaction.

In the study conducted by Forsterling, Schuster, and Morgenstern (2005), 89 couples were recruited in which one member was diagnosed with major depressive disorder. The purpose of the study was to investigate the partners' causal attributions for outcomes of success and how they affected the overall level of couple satisfaction. The researchers created two variables of depressogenic attributions and antidepressogenic attributions. Depressogenic attributions and antidepressogenic attributions represent high versus low values, respectively of a composite index that indicated whether individuals attribute successes or failures to an internal versus external locus of control, stable versus unstable factors, and global versus specific causes. High scores on the index were termed antidepressogenic and low scores were termed depressogenic. It was found that depressed partners made more depressogenic attributions for themselves (they blamed stable, global characteristics of themselves for their failures) whereas they held more antidepressogenic attributions for their partners' behaviors (they were more positive about their partners' successes, as caused by stable, global characteristics of the partner). Concurrently, the

non-depressed partners made more antidepressogenic attributions for themselves and more depressogenic attributions for their symptomatic partners. However, depressed partners were more pessimistic about themselves and their partners more than their partners were about them. It was also found that depressed partners were less satisfied with the relationship than their non-depressed partners.

These findings were similar to the results of Heene, Buysse, and van Oost (2005) where causal attributions mediated the association between depressive symptoms and marital adjustment for both depressed men and women. Based on a sample of 415 nonclinical community couples, the researchers explored to what degree self-reported attribution style, conflict communication, and adult attachment style mediated the relation between depressive symptoms and marital satisfaction. Conflict communication included constructive patterns of communication, as well as the problematic patterns of demand/withdrawal, and mutual avoidance. These forms of communication were measured with the Communication Patterns Questionnaire (CPQ; Christensen & Sullaway, 1984). Attributions included causal and responsibility types and were measured with the *Relationship Attribution Measure* (RAM; Fincham & Bradbury, 1992). Causal attributions included locus (where the blame is placed) and globality (a cause of negative event is viewed as affecting many areas of the relationship). Responsibility attributions reflected the intentional motives attributed to the partner (e.g., the partner is viewed as acting out of selfishness). Attachment styles included secure, anxious, and avoidant attachments and were measured with the Adult Attachment Scale (AAS; Collins & Reed, 1990), and relationship satisfaction was measured with the Dyadic Adjustment Scale (DAS; Spanier, 1976). Heene et al. (2005) found that selfreported conflict communication associated with the depressive symptoms of the depressed partner was a more important correlate of marital satisfaction than the depressive symptoms themselves. It was also found that causal and responsibility attributions mediated marital adjustment and depressive symptoms for both men and women. This suggests that partners tend to see each other as the cause of negative relationship events, which would ultimately lead to relationship dissatisfaction.

Another example of how perceptions influence relationship satisfaction and psychopathological symptoms is the study by Jeglic, Pepper, and Ryabchenko (2005). In that study, 31 married couples in which one of the partners was currently depressed and in a primary medical care setting were interviewed and compared to a community sample of couples with no depressed partner. It was found that individuals living with depressed partners experienced higher levels of depression themselves than those whose partners were not depressed. More importantly, the subjective cognitions of caregiving burden of the non-symptomatic partner were found to mediate the relationship between depressive symptoms in the spouse and those in the symptomatic partner.

Moderators of Partner Responses to Relationship Stressors

Graham and Conoley (2006) examined the moderating effect of attributions on the build up of life stressors and marital quality. This study explored the personal attributions made by each partner and how they affect the level of marital quality during stressful periods in the relationship. The sample consisted of 58 couples who had been married on average 16.4 years. Results showed that attributions had a moderating effect on the association between stressful events and marital quality. Couples who made negative attributions about each other were less satisfied in their relationships when

stressors affected the relationship, whereas among those couples who made positive attributions about each other, stress was unrelated to marital distress. Graham and Conoley point out that this finding means that "marital attributions can play a protective role for the marriage in the face of life events" (2006, p. 238). This suggests that couples in these marriages have a greater capacity to cope with stressful events, preventing the events from having a negative impact in the couple relationship.

In contrast, Bradbury, Beach, Fincham, and Nelson's (1996) study found varying results with respect to attributions. Bradbury et al. explored spousal attributions for their partners and if they were related to their own behavior. The sample was based on three subgroups: couples in which neither spouse was depressed or distressed (n = 19), couples in which the wife was depressed and both spouses were distressed (n = 13), and couples in which the wife was not depressed but both spouses were distressed (n = 20).

Participants completed self-report measures including the *Dyadic Adjustment Scale* (DAS), the *Beck Depression Inventory* (BDI; Beck, Rial, & Rickets, 1974), and the *Marital Attribution Style Questionnaire* (MASQ; Fincham & Bradbury, 1987). Results showed that the attributions of the husbands of the nondepressed, nondistressed group were more benign than those of either of the other two groups, which did not differ from one another. The researchers observed, "this finding is consistent with the extensive literature on attributions and marriage and suggest that the attributions and satisfaction association does not vary as a function of depression" (Bradbury et al., 1996, p. 571).

Comorbidity of Psychopathological Conditions

Research has found a strong incidence of comorbidity among types of psychopathological conditions (e.g., depression and anxiety; eating disorder and

obsessive-compulsive disorder). Whisman (1999) evaluated the association between marital dissatisfaction and individuals' current disorders, and how different disorders influenced each other's association with marital distress. Using the National Comorbidity Survey (Kessler et al., 1994), which includes data collected from 2,538 participants, Whisman found that when the variance between comorbid disorders and marital dissatisfaction was controlled, the direct association between marital dissatisfaction and presence of any particular disorder was no longer significant. This study demonstrated that it is important for researchers to confirm that an observed association between a disorder and relationship distress is not caused by comorbid conditions. On the other hand, even though Whisman's (1999) findings suggest that it may be difficult to isolate a particular form of psychopathology that is especially related to relationship problems, the results of his study provide further evidence that psychopathology and relationship functioning are closely linked, and clinical assessment should encompass both individual and relationship characteristics.

Shaver, Schachner, and Mikulincer (2005) explored how excessive reassurance seeking (ERS) and attachment anxiety were related to each other, levels of depression, and overall relationship quality. For the purpose of the study, excessive reassurance was defined as the tendency to persistently seek assurances from others that one is lovable and of worth, regardless of whether the others have offered such assurance previously. Based on attachment theory (Johnson & Denton, 2002), attachment anxiety was defined as the vulnerability that a person feels about rejection and abandonment. One hundred and three student couples were recruited from introductory classes at a large research university. Findings showed that ERS and attachment anxiety were both associated with depression.

The study also produced a gender difference, in that the relationship quality for women was lowered by their perceptions of their partner's ERS whereas men's relationship quality was unrelated to their perceptions of partner ERS.

In summary, other than Heene et al.'s (2005) study, potential mediators of the relation between psychopathological symptoms and relationship distress, such as the other partner's cognitions about the symptomatic partner, have not been studied. In order to fill in this gap in knowledge, the present study investigated: (a) the relationships between psychopathological symptoms and both partners' levels of marital satisfaction, (b) the relationships between psychopathological symptoms and both partners' negative cognitions about the other person, and (c) the degree to which partner cognitions mediate the relation between an individual's symptoms and each partner's relationship distress.

#### Gender Differences

Researchers have found significant differences in gender and psychopathology symptoms. One consistent gender difference is the higher rate of depression found in women than men (Beach, Sandeen, & Leary, 1990; Benazon & Coyne, 2000; Breslin, Gnam, Franche, Mustard, & Lin, 2006). In the studies stemming from this consistent finding, researchers have explored the potential reasons for this discrepancy between the genders. Dalgard et al. (2006) explored "if differences in negative life events, vulnerability and social support may explain the gender difference in depression" (p. 444). The study was created to establish the reason why rates of depression are higher in women, and explore whether women are exposed to negative life events more than men, have less social support, and/or possess a higher vulnerability to negative events.

The study included a random sample of 8,832 men and women from five different

countries (Finland, England, Ireland, Spain, and Norway) collected from population registers, health authorities, or local practices with which the patients were listed. Participants who reported depression based on the *Beck Depression Inventory* (BDI) (score >12) were included for the study. In all five countries, women reported higher rates of depression than men. A 12-item inventory of threatening experiences (Brugha, Bebbington, Tennant, & Hurry, 1985) was used to measure negative life events. Social support was measured with the Oslo 3 support scale, a short questionnaire "with questions about number of close confidants, sense of concern or interest from other people, a relationship to neighbours" (Dalgard et al., p. 446). Results showed that women reported more negative life events than men. A strong association between depression and negative life events was found in both genders. It was also found that there was a significant increase in depression when there was a decrease in social support. This was the same for both genders; however, in the subgroup of women who reported negative life events, the rate of depression was almost twice as high. Overall, there was no gender vulnerability to negative events; however, men were more vulnerable to separation/divorce issues, whereas women were more vulnerable to social network problems.

In another study that explored the possible reason for the gender difference in depression, Breslin, Gnam, Franche, Mustard, and Lin (2006) examined the association between depression and activity limitation. Activity limitations as defined by the researchers are limitations in role functioning, including physical and social disability. Based on data from the Canadian National Population Health Survey (HPHS), a longitudinal study of a representative sample of Canadian men and women, the study

used a sample of 7,732 respondents ranging in age from 18-60 years old. Three questions that inquired about physical health, or mental restrictions at home, work, and leisure activities were used to assess activity limitation. Depression in the last 12 months was determined with the *UM-CIDI* (University of Michigan - Composite International Diagnostic Interview). In general, there was an association between higher levels of depression and higher rates of activity limitation for both genders. Along with reporting higher rates of depression, women reported more activity limitation at home and more medical conditions. There was a gender difference in the relationship between activity limitation for leisure activities and depression, but not for home and work activities. For example, men who had activity limitations in out-of-home pursuits were more depressed, whereas women who lacked social times visiting friends and family were more depressed.

Bradbury, Beach, Fincham, and Nelson (1996) found that a gender difference existed between partners' reactions and attributions toward their spouses. The sample consisted of 52 cohabiting married couples, divided into three subgroups: nondistressed and nondepressed (n=19); distressed and nondepressed (n=13); and distressed and depressed (n=20), where the wife scored higher than 14 on the BDI. Participating couples were recruited through newspaper advertisements, marriage clinics, and mental health clinics. The *Dyadic Adjustment Scale* (DAS; Spanier, 1976) was used to assess relationship satisfaction and the *Beck Depression Inventory* (BDI; Beck, Rial, & Rickets, 1974) was used to measure levels of depression. The *Marital Attribution Style Questionnaire* (MASQ; Fincham & Bradbury, 1987) was used to assess responsibility attributions through hypothetical questions about their partners' behaviors. For example,

the spouse had to gauge if the negative/positive behavior was intentional, motivated by selfish reasons, or if the partner needed to be punished. Results indicated that "wives' relatively maladaptive attributions covaried with less positive behavior and more negative behavior in a marital problem-solving discussion" (Bradbury et al., 1996, p. 573).

Another result was the gender difference between attributions and behavior. A strong significant association between attributions and behavior was found for women but not for men. This finding "might suggest a gender difference in the nature of the information that contributes to the formation and maintenance of attributions. Such a difference is consistent with the position that wives are more sensitive than husbands to their relationships" (Bradbury et al., p. 574).

In a study conducted on the internet, gender was found to be a moderator of the relation between marriage quality and depression. Tower and Krasner (2006) explored how naming one's spouse as one's confidant and emotional support, perceiving that oneself would be named as the spouse's confidant and emotional support, and sexual satisfaction can protect against depression for both genders. The sample of 1,163 married individuals was collected through an online survey. Participants ranged in age from 19-84 and voluntarily answered questions that asked them to describe their perceptions of the various aspects of their marriage including marital closeness, sexual satisfaction, autonomy, mastery, and interpersonal relationships. Marital closeness was defined as "one special person you know that you feel very close and intimate with" (Tower & Krasner, 2006, p. 434) or in other words, a confidant. Sexual satisfaction referred to the quality of sex life. Autonomy scale assessed the individual's comfort with independence. Mastery referred to the individual's overall feeling of self-confidence and competency.

Depression was measured using the 20-item Center for Epidemiologic Studies on Depression Scale (CES – D) that assesses depressive symptoms in the previous week.

Results showed that women of all ages who were closer to their husbands were significantly less depressed than those women who were less close. Women were less depressed when they named their spouse and were named by their spouse as a confidant whereas men were less depressed when they named their wife as an emotional support.

In a study that explored gender differences in bipolar disorder, Benazzi (2006) found that women were more common in the younger illness onset group, but overall females were not more common than males according to age. The study consisted of previously diagnosed bipolar patients from an outpatient psychiatry practice in northern Italy. A total of 374 outpatients participated voluntarily and completed a battery of assessments. Age groups were divided in to four groups; 40+, 30 – 39, 21 – 29, and < 20. The Global Assessment of Functioning Scales was used to assess overall functioning, the MADRS (Montgomery Asberg Depression Rating Scale) was used to measure depression, the Hypomania Interview Guide to assess intra-MDE hypomanic symptoms, and the structured Family History Screen for assessing family history or suicidal behaviors. It was found that women showed a younger onset, had more axis I comorbidity, mixed depression, suicidal ideation, and family history of suicidal behavior. However, there was no gender difference in the presence of the hypomania phases.

As is apparent through the previous literature review, some gender differences have been found to exist between psychopathological symptoms and relationship satisfaction. Other studies have focused on one diagnosis such as depression, bipolar, or anxiety, whereas the research questions in the current study explored the effect of

psychopathological symptoms more broadly and how they affect the partners' overall levels of relationship satisfaction. This takes in to account potential comorbidity between mental conditions, as well as potential gender differences.

#### <u>Definition of Variables</u>

The independent variable in this study was the degree of the individual's psychopathological symptoms. Potential mediator variables were the other partner's (partner 2's) cognitions about the symptomatic partner (partner 1), and partner 1's cognitions about partner 2. The dependent variables were partner 1's level of relationship satisfaction and partner 2's level of relationship satisfaction. Psychopathological symptoms are the dysfunctional cognitions, emotions, and behaviors exhibited by an individual that negatively affect that person's daily functioning and reasoning capacity. Examples of psychopathological symptoms are the low mood, self-criticism, sense of hopelessness, and low level of motivation typical of depression; the worries, muscle tension, and general sense of apprehension typical of anxiety; and the auditory hallucinations and paranoid delusions common in schizophrenia (DSM-IV; American Psychiatric Association, 1994). Cognitions are the thoughts that the individual experiences regarding life events. The cognitions that the present study focused on are the attributions that partners make about each other as sources of problems in their relationship. In particular, each person's attributions that relationship problems are due to negative characteristics of the other person were examined.

#### <u>Hypotheses</u>

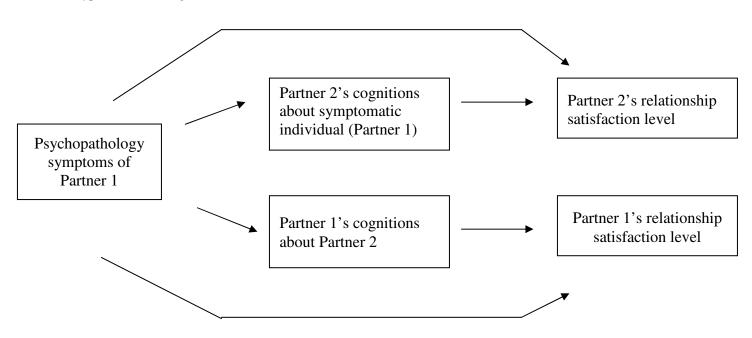
The following hypotheses were tested:

- 1. The greater the degree of psychopathological symptoms reported by partner 1, the lower partner 2's relationship satisfaction.
- 2. The greater the degree of psychopathological symptoms reported by partner 1, the lower partner 1's own relationship satisfaction.
- 3. The greater the degree of psychopathological symptoms reported by partner 1, the more negative cognitions partner 2 had about partner 1.
- 4. The greater the degree of psychopathological symptoms reported by partner 1, the more negative cognitions partner 1 had about partner 2.
- 5. The more that partner 1 experienced negative cognitions about partner 2, the lower partner 1's relationship satisfaction. This hypothesis was tested separately for both females and males.
- 6. The association between psychopathological symptoms reported by partner 1 and partner 2's relationship satisfaction level was mediated by partner 2's negative cognitions about partner 1. That is, when cognitions are controlled, the association between symptoms and satisfaction declined or disappeared.
- 7. The association between psychopathological symptoms reported by partner 1 and partner 1's own relationship satisfaction level will be mediated by partner 1's negative cognitions about partner 2. That is, when cognitions are controlled, the association between symptoms and satisfaction declined or disappeared.

#### Research Questions

- 1. Was there a gender difference in the relationship between one partner's psychopathological symptoms and their own satisfaction?
- 2. Was there a gender difference in the relationship between one partner's psychopathological symptoms and their partner's satisfaction?
- 3. Was there a gender difference in the relationship between one partner's psychopathological symptoms and the other partner's cognitions about the symptomatic individual?
- 4. Was there a gender difference in the relationship between one partner's psychopathological symptoms and that individual's cognitions about their partner?
- 5. Was there a gender difference in the relationship between one individual's negative cognitions about their partner and their relationship satisfaction?

Figure 1.1 *Hypotheses Design Model* 



### Chapter 2: Method

#### Sample

A sample of 83 couples from the ongoing outpatient Couples Abuse Prevention Program project at the University of Maryland's Family Service Center was used for this study. The current study involved a secondary analysis of the existing Family Service Center database that includes couples' responses to a large set of pre-therapy assessment instruments. Couples who present to the Family Service Center for therapy complete a variety of self-report measures assessing aspects of individual and relationship functioning, including the measures selected for the present study. All couples who attend the clinic complete a Day 1 assessment lasting approximately two hours. However, those who report instances of psychological and/or mild to moderate physical abuse in their relationship are offered participation in a program comparing alternative types of couple therapy to reduce the abusive behavior and improve conflict resolution and are scheduled for a Day 2 assessment session if they agree to participate in the program. When couples were invited and chose to participate, both partners were required to sign consent-to-participate forms that outlined the details of the study. The Day 2 assessment session involves completing additional questionnaires and a videotaped couple discussion of a topic of conflict in their relationship, which provides a sample of the couple's communication behavior. The inclusion criteria for the Couples Abuse Prevention Program (CAPP) are as follows:

- both partners are 18 or older
- both partners report commitment to the relationship

- one or both partners report mild to moderate levels of psychological and/or physical abuse; no severe forms of abuse
- both partners feel safe living and participating in conjoint couple therapy with each other
- neither partner has untreated substance abuse

All of the data used in this study are from the Day 1 and Day 2 assessments conducted before couples began therapy at the Family Service Center. All identifying information was removed from the data when couples' assessment information was entered into the clinic database, and this researcher received the data in computer file format. The following is a description of the demographics of the sample.

Table 2.1 *Demographic Groups* 

Variables	Males	
	n=83	n=83
Mean age of partner (SD)		
	33 (8.7)	31 (8.2)
Average length of relationship (SD)	6 years (6.2)	6 years (6.5)
Relationship status	#/%	#/%
Married, living together	46 / 55%	47 / 57%
Married, separated	3 / 3%	3 / 4%
Living together, not married	19 / 23%	18 / 22%
Separated	2 / 2%	1 / 1%
Dating, not living together	13 / 16%	14 / 17%
Race		
African American	28 / 34%	33 / 40%
Caucasian	43 / 52%	37 / 45%
Hispanic	7 / 8%	7 / 8%
Native American (males) Asian (females)	2/2%	1 / 1%
Other	3 / 4%	4/5%

#### *Instruments*

The following self-report instruments (see copies in the Appendix) were used to assess the degrees of psychopathological symptoms, negative cognitions, and overall relationship satisfaction of the partners: the *Brief Symptom Inventory* (BSI) was used to determine each partner's experience of psychopathological symptoms; the *Styles of Conflict Inventory* (SCI) assessed the partners' constructive, aggressive, and withdrawal cognitions; the *Marital Attitude Survey* (MAS) assessed attributions about one's partner, and the *Dyadic Adjustment Scale* (DAS) was used to assess each partner's overall level of relationship satisfaction.

Brief Symptom Inventory (BSI)

The *BSI* (Derogatis, 1977) is a commonly used instrument that measures a client's range and intensity of psychopathological symptoms at a given point in time. Subscales represent symptoms including psychoticism, somatization, depression, hostility, phobic anxiety, obsessive-compulsive, anxiety (panic anxiety), paranoid ideation, anxiety, and interpersonal sensitivity. The 53-item scale was derived from the original 90-item Symptom Checklist - 90 (SCL-90). Respondents rate the presence of symptoms using the following response scale for each item: 0 = not at all, 1 = a little bit, 2 = moderately, 3 = quite a bit, and 4 = extremely. Evidence for the validity and reliability of the BSI are strong (Boulet & Boss, 1991). The internal consistency reliability ranges from .71 to .85 for the nine dimensions. Test-retest reliability coefficients range from .68 to .91.

Although some reliability was lost when the BSI was reduced from the SCL-90, the BSI remains a reliable test. The convergent validity for the BSI is good. For example, correlations with other measures of the same types of symptoms are consistent. The BSI

has moderate discriminant validity and has the ability to differentiate diagnostic groups of symptoms as well. Symptoms are divided in to nine primary symptom dimensions including somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. For the purpose of the study, interpersonal sensitivity and hostility subscales have been excluded because there was concern that their focus on distress in personal relationship would be confounded with the assessment of relationship satisfaction. The BSI was completed by both partners.

For the purpose of this study, a total BSI score created by adding the subscales together (except for hostility and interpersonal sensitivity) was used to test the hypotheses.

Table 2.2 Subscales of the BSI

#### Symptoms of Somatization Dimension

пеш	Symptom
2	faintness or dizziness
7	pains in heart of chest
23	nausea or upset stomach
29	trouble getting your breath
30	hot or cold spells
33	numbness or tingling in parts of your body
37	feeling weak in parts of your body

#### Symptoms of Obsessive-Compulsive Dimension

7 7 0 0 1	
Item	Symptom
5	Trouble remembering things
15	Feeling blocked in getting things done
26	Having to check and double-check what you do
27	Difficulty making decisions
32	Your mind going blank
36	Trouble concentrating

#### Symptoms of Depression Dimension

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<u>Item</u>	Symptom
9	Thoughts of ending your life
16	Feeling lonely
17	Feeling blue
18	Feeling no interest in things
35	Feeling hopeless about the future
50	Feelings of worthlessness

#### Symptoms of Anxiety Dimension

Item	Symptom
1	Nervousness or shakiness inside
12	Suddenly scared for no reason
19	Feeling fearful
38	Feeling tense or keyed up
45	Spells of terror or panic
49	Feeling so restless you couldn't sit still

## Symptoms of Phobic Dimension

<u>Item</u>	<u>Symptom</u>
8	Feeling afraid in open spaces or on the streets
28	Feeling afraid to travel on buses, subways, or trains
31	Having to avoid certain things, places, or activities because they frighten you
43	Feeling uneasy in crowds, such as shopping or at a movie
47	Feeling nervous when you are left alone

## Symptoms of Paranoid Ideation Dimension

<u>Symptom</u>
Feeling others are to blame for most of your troubles
Feeling that most people cannot be trusted
Feeling that you are watched or talked about by others
Others not giving you proper credit for your achievements
Feeling that people will take advantage of you if you let them

#### Symptoms of Psychoticism Dimension

Item	Symptom
3	The idea that someone else can control your thoughts
14	Feeling lonely even when you are with people
34	The idea that you should be punished for your sins
44	Never feeling close to another person
53	The idea that something is wrong with your mind

Styles of Conflict Inventory (SCI)

The SCI (Metz, 1993) is a widely used self-report questionnaire that measures partners' behavioral, cognitive, and affective responses when there is discord in their relationship. The 30-item cognitions subscale of the SCI presents statements that

represent "automatic thoughts" (Beck, Rush, Shaw, & Emery, 1979) that an individual might experience during periods of conflict with his or her partner. The respondent is asked to rate the frequency with which he or she experiences each type of thought, such as "Let's work this out together," "I want to go away," or "I should let you have your way" during couple conflict, using the following values: 1 = never, 2 = rarely, 3 = occasionally, 4 = often, 5 = very often. There are four subscales on the SCI including (a) aggressive cognitions, (b) constructive cognitions, (c) submissive cognitions, and (d) withdrawal and avoidance cognitions. However, for the purposes of the study, the separate scores from the two SCI subscales assessing aggressive cognitions and withdrawal and avoidance cognitions were used to assess cognitive variables possibly mediating between psychopathological symptoms and relationship distress. The SCI was completed by both partners.

The SCI questions that are included in the two subscales used in this study,

(a) withdrawal and avoidance cognitions and (b) aggressive cognitions are listed in Table

2.3 below. Each partner's total score from each of the two subscales was used for the

purposes of this study. Corresponding items are marked on the copy of the SCI that

appears in Appendix B.

Table 2.3
Subscales of the Styles of Conflict Inventory (SCI)

#### Withdrawal and Avoidance (WA) Items

- 2 Go away; leave me alone
- 4 I'll deal with it later
- 9 We'd better not get into this; avoid the subject
- 13 I want out
- 14 I won't deal with this
- 17 I want to go away
- 18 I want to ignore this
- 20 I wish I weren't here

- 23 How can I get out of this?
- 24 I'll withdraw
- 28 I should avoid the issue

#### Aggressive (AG) Items

- 5 You've got no right to
- 7 I hate you
- What the hell makes you think you can
- 15 I'll get you back
- You make me angry

Marital Attitude Survey (MAS)

The MAS (Pretzer, Epstein, & Fleming, 1991) assesses attributions that each member of a couple makes about the self and other, regarding causes of relationship problems. The MAS subscales include attributions for relationship problems to (a) one's own behavior, (b) one's partner's behavior, (c) one's own personality, (d) one's partner's personality, (e) the partner's lack of love, and (f) the partner's malicious intent. Prior research (Sayers, Kohn, Fresco, Bellack, & Sarwer, 2001) has demonstrated evidence of good reliability and validity for the MAS. For the purposes of the present study, the MAS subscale scores for partner's behavior, partner's personality, partner's lack of love, and partner's malicious intent were summed to create an index assessing negative attributions about the partner as a cause of relationship problems. The total score from the composite of those four MAS subscales was used as another possible cognitive mediator between psychopathology and relationship distress. See Table 2.4 for a listing of items included in each subscale.

Table 2.4
Subscales of the Marital Attitude Survey (MAS)

#### Attribution of Relationship Problems to Partner's Behavior (PB)

- 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.
- Whatever problems we have are caused by the things my partner says and does.
- The things my partner says and does aren't the cause or whatever problems come up between us.

#### Attribution of Relationship Problems to Partner's Personality (PP)

- 5 Even if my partner's personality changed we still wouldn't get along any better.
- 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.
- My partner and I would get along better if it weren't for the type of person he/she is.

#### Attribution of Relationship Problems to Partner's Lack of Love (LL)

- 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.
- What difficulties we have don't lead me to doubt my partner's love for me.
- When things are rough between us it shows that my partner doesn't love me.
- Even when we aren't getting along, I don't question whether my partner loves me.
- When my partner isn't nice to me I feel like he/she doesn't love me.
- Even when we have problems I don't doubt my partners' love for me.

#### Attribution of Relationship Problems to Partner's Malicious Intent (MI)

- 2 My partner doesn't seem to do things just to bother me.
- 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.
- I'm sure that my partner sometimes does things just to bother me.
- I think my partner upsets me on purpose.
- I'm certain that my partner doesn't provoke me on purpose.
- I doubt that my partner deliberately does things to irritate me.

Dyadic Adjustment Scale (DAS)

The *DAS* (Spanier, 1976) has been used extensively in studies around the world as a measure of overall relationship adjustment or satisfaction. Although there has been some disagreement about the construct that it measures (e.g., the items include some assessing amount of disagreement between partners as well as some assessing amount of affection expressed), the DAS has demonstrated high internal consistency (e.g., .96 in Spanier's original research) and validity as an index of overall relationship quality (Kurdek, 1992). The scale is a 32-item self-report measure with total scores ranging from 0-151 and scores lower than 100 are considered to indicate relationship distress. There

are four subscales in the DAS but standard research practice uses the total score from all 32-items. The DAS was completed by both partners in the original study. In the present study, the total DAS score was used to represent each partner's overall level of relationship satisfaction.

#### <u>Procedure</u>

Family Service Center data from the assessments of couples were used for the statistical analyses in this study. All of the procedures used to collect the data were completed for the original CAPP project, so the present study was a secondary analysis of the existing data that are stored without identifiers. Bivariate Pearson correlations and partial correlation analyses were used to test the hypotheses. The list of the hypotheses and the analyses used to test them is included in the following section. Pearson and partial correlations also were used to examine the research questions involving gender.

## Chapter 3: Results

#### **General Findings**

Participants' total scores were summed to determine the overall level of satisfaction on the *Dyadic Adjustment Scale* (DAS). According to Spanier (1976), scores less than 100 denote distress in the couple relationship. These total scores were used for all statistical analyses that included relationship satisfaction. Scores for men and women were tallied separately. The mean and standard deviation for men were 85.44 and 22.60, respectively, and the mean and standard deviation for women were 91.92 and 21.47, respectively (see Table 3.3). The difference between the mean scores of the men and the women was significant, t (82) = 3.16, p = .002.

To determine the degree of psychopathological symptoms, a composite variable was created from the *Brief Symptom Inventory* (BSI) subscales, included depression, phobia, anxiety, obsessive-compulsive, somatization, paranoia, and psychoticism. Higher scores indicate the presence of more psychopathological symptoms. Analyses were computed for men and women separately. The mean and standard deviation for men were 31.10 and 22.29, respectively, and the mean and standard deviation for women were 22.14 and 18.78, respectively (see Table 3.3). The difference between the mean scores of men and women was significant, t (82) = 2.84, p = .006.

Table 3.1 Sample Scores on the BSI Subscales by Gender (higher scores denote greater degree of symptoms)

BSI Subscale	Min/Max	Mean	SD
Paranoid (Females)	.00/18.00	4.6	4.0
Paranoid (Males)	.00/18.00	3.9	3.8
Psychoticism (Females)	.00/17.00	3.2	3.2
Psychoticism (Males)	.00/14.00	2.2	2.5
Somatization (Females)	.00/22.00	4.0	4.2
Somatization (Males)	.00/13.00	2.4	3.0
Obsessive-Compulsive (Females)	.00/22.00	7.0	5.2
Obsessive-Compulsive (Males)	.00/18.00	5.4	5.0
Depression (Females)	.00/22.00	6.1	5.3
Depression (Males)	.00/20.00	4.2	4.6
Anxiety (Females)	.00/21.00	4.6	4.5
Anxiety (Males)	.00/17.00	3.3	3.5
Phobic (Females)	.00/14.00	1.6	2.4
Phobic (Males)	.00/5.00	0.8	1.2

*Note: BSI* = *Brief Symptom Inventory* 

The items from the *Styles of Conflict Inventory* (SCI) aggressive and withdrawal and avoidance cognitions subscales were summed separately to create two variables that were used to assess negative cognitions. Analyses were computed for men and women separately. The mean and standard deviation on the aggressive cognitions subscale for men were 7.91 and 2.72, respectively, and the mean and standard deviation for women were 9.38 and 3.30, respectively (see Table 3.3). The difference between the male and female mean scores was significant, t (80) = 3.40, p = .00. The mean and standard deviation for the withdrawal and avoidance scale for men were 31.30 and 8.84, respectively, and the mean and standard deviation for women were 33.28 and 9.00, respectively (see Table 3.3). The difference between the male and female mean scores was not significant.

The range of aggressive cognition scores for women was 4 - 16, mean 9.3 (SD 3.3) and the range of withdrawal and avoidance cognitions for women was 15 - 56, mean 33.1 (SD 9.1). The range of aggressive cognition scores for men was 4 - 14, mean 7.9 (SD 2.7) and the range of withdrawal and avoidance cognitions for men was 12 - 52, mean 31.4 (SD 8.8).

Table 3.2 SCI Subscale Results

SCI Cognition Subscales	Min. Possible	Max. Possible	Range in Sample	Mean	Standard Deviation
Aggressive Cognitions (W)	4	25	4 – 16	9.3	3.3
Withdrawal Avoidance (W)	11	55	15 – 56	33.1	9.1
Aggressive Cognitions (M)	4	25	4 – 14	7.9	2.7
Withdrawal Avoidance (M)	11	55	12 – 52	31.4	8.8

*Note:* W = women: M = men

The subscales from the *Marital Attitude Survey* (MAS) were also used to explore the cognitions of the couple partners. For the purposes of this study, a negative attributions about partner index was created by summing the individual's scores on the four subscales of (a) partner's behavior, b) partner's personality, c) partner's lack of love, and d) partner's malicious intent. A *lower* score indicates more negative attributions about the partner. Men and women were scored separately. The mean and standard deviation for men's negative attributions were 76.14 and 1.92, respectively and the mean and standard deviation for women's negative attributions were 72.30 and 16.78, respectively (see Table 3.3). The difference between men's and women's mean scores was not significant but showed a trend, t (80) = 1.86, p = .067. The range in scores for women was 34 - 108 and the range for men was 43 - 109.

Table 3.3 *MAS Subscale Results* 

MAS Variables	Min. Possible	Max. Possible	Range in Sample	Mean	Standard Deviation
Negative Attributions W	23	115	34 – 108	72.2	16.7
Negative Attributions M	23	115	43 – 109	76.1	17.2

Note: W = women; M = men

Table 3.4 *Means and Standard Deviations and Gender Differences on the DAS, BSI, SCI, and MAS* 

DAS	Mean	SD	t (80 df)	p
Men	91.92	21.47		
Women	85.44	22.60	3.16	.002
BSI	Mean	SD	T	p
Men	22.14	18.78		
Women	31.10	22.29	2.84	.006
SCI Aggressive	Mean	SD	t	p
Men	7.91	2.72		
Women	9.38	3.30	3.40	.001
SCI WD/Avoid	Mean	SD	t	p
Men	31.30	8.84		
Women	33.28	8.99	1.39	ns
MAS	Mean	SD	t	p
Men	76.14	17.28		
Women	72.31	16.78	1.87	.067

Note:  $DAS = Dyadic \ Adjustment \ Scale; \ BSI = Brief \ Symptom \ Inventory; \ SCI = Styles \ of \ Conflict \ Inventory; \ MAS = Marital \ Attitude \ Scale$ 

Using the data from the study's sample, Cronbach's alpha was used to test internal consistency reliability of subscales of the *SCI* and *MAS* instruments.

Table 3.5

Cronbach's alpha for the SCI Subscales

	Cronbach's Alpha	Mean	Standard Deviation
SCI Aggressive Women	.78	10.7	3.6
SCI Withdraw/Avoid Women	.90	25.8	8.3
SCI Aggressive Men	.78	9.3	2.8
SCI Withdraw/Avoid Men	.91	26.0	8.3

Table 3.6 *Cronbach's alpha for the MAS Subscales* 

	Cronbach's Alpha	Mean	Standard Deviation
MAS Partner's Behavior Women	.42	12.2	2.8
MAS Partner's Personality Women	.54	12.2	3.5
MAS Partner's Lack of Love Women	.91	26.9	7.6
MAS Partner's Malicious Intent Women	.96	32.7	9.1
MAS Partner's Behavior Men	.71	12.0	3.4
MAS Partner's Personality Men	.55	11.2	3.1
MAS Partner's Lack of Love Men	.88	29.4	6.4
MAS Partner's Malicious Intent Men	.86	34.2	6.0

### Tests of the Hypotheses

The following are the descriptions and results of the statistical analyses used to test the hypotheses. The two main statistical analyses employed to test the hypotheses were Pearson correlations and partial correlations. Pearson correlations and partial correlations were used for the research questions as well. Each hypothesis or research question is re-stated, and then the results of the analysis for it are described.

Hypothesis 1

The greater the degree of psychopathological symptoms reported by partner 1, the lower partner 2's satisfaction.

Pearson correlations were used to determine the direction and strength of the association between psychopathological symptoms and relationship satisfaction. The tests were one-tailed because the hypothesis was directional. The correlation between females' BSI scores and males' DAS scores was .01 (not significant). The correlation between males' BSI scores and females' DAS scores was .06 (not significant). The results did not support the hypothesis.

#### Hypothesis 2

The greater the degree of psychopathological symptoms reported by partner 1, the lower partner 1's own satisfaction.

Pearson correlations were used to determine the direction and strength of the direct association between psychopathological symptoms and relationship satisfaction. The tests were one-tailed because the hypothesis was directional. The correlation between females' BSI scores and their own DAS scores was -.16 (not significant) although it did represent a statistical trend (p = .07). The correlation between males' BSI scores and their own DAS scores was .05 (not significant). This there was only slight support for the hypothesis, and only for females.

#### Hypothesis 3

The greater the degree of psychopathological symptoms reported by partner 1, the more negative cognitions partner 2 will have about partner 1.

Pearson correlations were used to determine the direction and strength of the direct association between psychopathological symptoms and partners' negative cognitions about each other. The tests were one-tailed. The correlation between females' BSI scores and males' aggressive cognitions was .13 (not significant). The correlation

between females' BSI scores and males' withdrawal and avoidance cognitions was .08 (not significant). The correlation between females' BSI scores and males' negative attributions was .15 (not significant). The correlation between males' BSI scores and females' aggressive cognitions was -.23 and was significant (p = .02), but it was in the opposite direction to the hypothesized relation. The correlation between males' BSI scores and females' withdrawal and avoidance cognitions was -.22 and was significant (p = .02), although in the direction opposite to the hypothesized relation. The correlation between males' BSI scores and females' negative attributions was .03 (not significant).

#### Hypothesis 4

The greater the degree of psychopathological symptoms reported by partner 1, the more negative cognitions partner 1 will have about partner 2.

Pearson correlations were used to determine the direction and strength of the direct association between psychopathological symptoms and the person's own negative cognitions about their partner. The tests were one-tailed. The correlation between females' BSI scores and their own aggressive cognitions regarding their partner was .04 (not significant). The correlation between females' BSI scores and their own withdrawal and avoidance cognitions was .21 and was significant (p = .03), consistent with the hypothesis. The correlation between females' BSI scores and their own negative attributions about their partner was .08 (not significant). The correlation between males' BSI scores and their own aggressive cognitions about their partner was .21 and was significant (p = .03), consistent with the hypothesis. The correlation between males' BSI scores and their own withdrawal and avoidance cognitions was .20 and was significant

(p = .03). The correlation between males' BSI and their own negative attributions about their partner was .12 (not significant).

Table 3.7 *Hypotheses Results 1 – 4* 

Hypotheses 1 & 2		Dyadic	Dyadic
		Adjustment Score	Adjustment Score
		Female	Male
BSI total Female	Pearson Correlation	16	.01
	Sig. (1-tailed)	.07	.48
BSI total Male	Pearson Correlation	.06	05
	Sig. (1-tailed)	.29	.34
Hypotheses 3 & 4		BSI Total	BSI Total
		Female	Male
SCI – Aggressive Cognitions	Pearson Correlation	.04	23*
Female	Sig. (1-tailed)	.36	.02
SCI – Withdrawal & Avoid	Pearson Correlation	.21*	22*
Female	Sig. (1-tailed)	.03	.02
SCI – Aggressive Cognitions	Pearson Correlation	.13	.21*
Male	Sig. (1-tailed)	.13	.03
SCI – Withdrawal & Avoid	Pearson Correlation	.08	.20*
Male	Sig. (1-tailed)	.24	.03
Negative Attributions	Pearson Correlation	08	02
Female	Sig. (1-tailed)	.23	.41
Negative Attributions	Pearson Correlation	15	12
Male	Sig. (1-tailed)	.09	.15

Hypothesis 5

The more partner 1 experiences negative cognitions about partner 2, the lower partner 1's satisfaction. This hypothesis was tested separately for females and males.

Pearson correlations were used to determine the direction and strength of the direct association between an individual's psychopathological symptoms and his or her own relationship satisfaction. The tests were one-tailed, because the hypotheses were directional. The correlation between females' SCI aggressive cognitions and their own DAS scores was -.45 and was significant (p < .001). The correlation between females' withdrawal and avoidance cognitions and their own DAS scores was -.40 and was significant (p < .001). The correlation between females' negative attributions (lower

scores indicate more negative attributions) and their own DAS scores was .50 and was significant (p < .001).

The correlation between males' aggressive cognitions and their own DAS scores was -.37 and was significant (p = .001). The correlation between males' withdrawal and avoidance cognitions and their own DAS scores was -.57 and was significant (p < .001). The correlation between males' negative attributions and their own DAS scores was .56 and was significant (p < .001).

Table 3.8 *Hypothesis Results 5* 

Hypothesis 5		Dyadic	Dyadic
		Adjustment Score	Adjustment Score
		Female	Male
SCI – Aggressive Cognitions	Pearson Correlation	45**	27**
Female	Sig. (1-tailed)	< .001	.007
SCI – Withdrawal & Avoid	Pearson Correlation	40 **	.34**
Female	Sig. (1-tailed)	< .001	.001
SCI – Aggressive Cognitions	Pearson Correlation	31**	36**
Male	Sig. (1-tailed)	.002	.000
SCI – Withdrawal & Avoid	Pearson Correlation	31**	57**
Male	Sig. (1-tailed)	.002	< .001
Negative Attributions	Pearson Correlation	.50**	.37**
Female	Sig. (1-tailed)	< .001	< .001
Negative Attributions	Pearson Correlation	.56**	.57**
Male	Sig. (1-tailed)	<.001	< .001

Hypothesis 6

The association between psychopathological symptoms reported by partner 1 and partner 2's satisfaction level is mediated by partner 2's negative cognitions about partner 1. That is, when cognitions are controlled, the association between symptoms and satisfaction will decline or disappear.

This hypothesis was tested with a partial correlation between husband's symptoms and wife's relationship satisfaction controlling for wife's negative attributions and cognitions concerning the husband. A partial correlation was also computed between

wife's symptoms and husband's relationship satisfaction controlling for husband's negative attributions and negative cognitions. The results regarding hypothesis 6 would indicate mediation if the Pearson correlation between partner 1's symptoms and partner 2's relationship satisfaction was significant (Hypothesis 1) but the partial correlation between partner 1's symptoms and partner 2's relationship satisfaction controlling for partner 2's negative attributions and cognitions was either significantly lower than the simple Pearson correlation or was no longer significant. However, Hypothesis 1 was not supported in the first place (i.e., there was no relationship between partner 1's symptoms and partner 2's relationship satisfaction). Thus, there was no relationship for partner 2's negative cognitions to mediate.

Table 3.9 *Hypothesis Results 6* 

Hypothesis 6		Dyadic	BSI
		Adjustment Score	Total
Control Variables		Female	Male
Aggressive Cognitions (female)	Pearson Correlation	16	.06
W/D & Avoidance Cog (female)	Sig. (1-tailed)	.07	.60
Negative Attributions (female)			
BSI total Male	Pearson Correlation	.06	04
	Sig. (1-tailed)	.29	.34
		Dyadic	BSI
		Dyadic Adjustment Score	BSI Total
Control Variables		•	
Control Variables Aggressive Cognitions (male)	Pearson Correlation	Adjustment Score	Total
	Pearson Correlation Sig. (1-tailed)	Adjustment Score Male	Total Female
Aggressive Cognitions (male)		Adjustment Score Male16	Total Female 13
Aggressive Cognitions (male) Withdrawal & Avoidance (male)		Adjustment Score Male16	Total Female 13

Hypothesis 7

The association between psychopathological symptoms reported by partner 1 and partner 1's own satisfaction level was mediated by partner 1's negative cognitions about partner 2. That is, when cognitions are controlled, the association between symptoms and satisfaction will decline or disappear.

This hypothesis was tested with a partial correlation between the wife's symptoms and her own relationship satisfaction controlling for her own negative cognitions and attributions and also the partial correlation between the husband's symptoms and his own relationship satisfaction controlling for his own negative cognitions and attributions.

These partial correlations were -.13 (not significant) and .09 (not significant), respectively. Thus, there was no relationship between one partner's own symptoms and his/her own relationship satisfaction when controlling for his/her own negative cognitions and attributions. However, these non-significant partial correlations do not demonstrate a mediator role for cognitions, because there were no significant Pearson correlations in the first place between an individual's symptoms and his or her own relationship satisfaction in tests of Hypothesis 2.

Table 3.10 *Hypothesis Results 7* 

Hypothesis 7		Dyadic	Dyadic
		Adjustment Score	Adjustment Score
		Female	Male
BSI total Female	Pearson Correlation	16	.01
	Sig. (1-tailed)	.07	.48
BSI total Male	Pearson Correlation	.06	05
	Sig. (1-tailed)	.29	.34

#### Tests of the Research Questions

#### Research Question 1

1. Was there a gender difference in the relationship between one partner's psychopathological symptoms and her/his own satisfaction?

Correlations were computed separately for females and for males (see Table 3.2), and as reported for the results for Hypothesis 2, neither correlation between one's own BSI

symptoms and own relationship satisfaction was statistically significant. Consequently, there was no gender difference.

#### Research Question 2

2. Was there a gender difference in the relationship between one partner's psychopathological symptoms and their partner's satisfaction?

Correlations were computed separately for females and for males (see Table 3.4), and, as reported for the findings for Hypothesis 1, in neither case was there an association between one partner's psychopathological symptoms and his/her partner's relationship satisfaction. Therefore there was no gender difference.

#### Research Question 3

3. Was there a gender difference in the relationship between one partner's psychopathological symptoms and the other partner's cognitions about the symptomatic individual?

Correlations were computed separately for females and for males (see Table 3.4). The correlations between females' BSI scores and males' aggressive, withdrawal and avoidance cognitions, and negative attributions did not show any significance. However, the correlations between males' BSI scores and females' aggressive and withdrawal and avoidance cognitions did show significance. Therefore, a gender difference was found for research question 3.

#### Research Question 4

4. Was there a gender difference in the relationship between one partner's psychopathological symptoms and that individual's cognitions about their partner?

Correlations were computed separately for females and for males (see Table 3.4). A significant positive correlation (.21) was found between females' BSI scores and females' withdrawal and avoidance cognitions. Significant positive correlations were also found between males' BSI scores and both their own aggressive cognitions (.20) and withdrawal/avoidance cognitions (.21). Therefore, there is a gender difference only for BSI symptoms and own aggressive cognitions.

#### Research Question 5

5. Was there a gender difference in the relationship between one individual's negative cognitions about their partner and their relationship satisfaction?

Correlations were computed separately for females and for males (see Table 3.4).

Females' DAS scores had correlations of -.45 with their aggressive cognitions, -.40 with their withdrawal and avoidance cognitions, and -.50 (sign corrected for MAS scoring key) with their negative cognitions, all significant. Males' DAS scores had correlations of -.36 with their aggressive cognitions, -.57 with their withdrawal and avoidance cognitions, and -.57 (sign corrected for MAS scoring key) with their negative cognitions, also all significant. Comparisons of corresponding correlations for the females and males were conducted by computing the test for the difference between two correlation coefficients, using r-to-z transformations, and none of the gender differences in

correlations (e.g., female and male correlation coefficients of -.45 and -.36, respectively, between DAS scores and aggressive cognitions) were significant.

## Chapter 4: Discussion

#### Summary of Overall Findings

The hypotheses that psychopathological symptoms would be directly associated with one's own and one's partner's relationship satisfaction were not supported. There was no direct correlation between psychopathological symptoms and relationship distress for either gender. A moderate trend was found between women's psychopathological symptoms and their *own* relationship satisfaction, meaning that when women exhibit more psychopathological symptoms, their satisfaction with the relationship is lower. This correlation was not found for men. These findings have important implications for the other hypotheses of this study that focus on possible mediation of cognitions between psychopathology and relationship distress. In response to the lack of support for this hypothesis, the investigator conducted exploratory analysis of the correlation between Beck Depression Inventory (BDI) scores and Dyadic Adjustment Scale (DAS) scores to confirm the validity of the data. Correlations were significant, showing that the sample contained enough of a range of psychopathological symptoms and relationship satisfaction.

There was no significant correlation between women's level of psychopathological symptoms and men's negative cognitions towards them. For example, when women exhibited psychopathological symptoms, this was not correlated with men's greater aggressive or withdrawal and avoidance cognitions towards her. However, the reverse was not true. Significant correlations were found between men's psychopathological symptoms and women's cognitions about their partners. For example,

when men exhibited more psychopathological symptoms, women reported less aggressive and withdrawal and avoidance cognitions towards them. Along with these findings, it was also noticed that when men exhibited more psychopathological symptoms, women reported more positive cognitions toward them. These findings were directly the opposite of what was expected. The hypothesis predicted that when a partner exhibited more symptoms, the aggressive and withdrawal and avoidance cognitions would increase, not decrease as was found. However, this finding is consistent with the literature indicating that women are more responsive to their husbands' needs in comparison to husband being aware and responsive to their wives' needs. Women typically take on the supportive and caring role in relationships and are emotionally invested in their husbands. Bradbury, Beach, Fincham, and Nelson (1996) suggest that this gender difference "is consistent with the position that wives are more sensitive than husbands to their relationship" (p. 574). Conversely, Heene, Buysse, and van Oost (2005) reported that they did not find a gender difference with respect to negative attributions partners have towards each other, but other findings in their study supported the premise that women typically put more effort into the romantic relationship in general.

Correlations were found between both women's and men's psychopathological symptoms and their own withdrawal and avoidance cognitions. When men and women experienced more psychopathological symptoms, they reported more withdrawal and avoidance cognitions about their partner. Whereas men showed more aggressive cognitions when they experienced more psychopathological symptoms, the same was not true for women. No correlation was found between women's psychopathological symptoms and their own aggressive cognitions. These findings align with Heene et al.

(2005), who found that depressed men and women attributed negative events to their partners compared to the non-depressed partners, who did not attribute the negative events to the depressed partner.

The hypothesis that cognitions would mediate the relationship between psychopathological symptoms was not supported. Negative cognitions were not found to be mediators between psychopathological symptoms because no association was found between symptoms and relationship distress in the first place. This does not support the current literature that states that attributions do mediate the association between symptoms and marital adjustment (Heene et al., 2005) and that psychopathological symptoms are directly associated with levels of relationship satisfaction (Beach, Smith, & Fincham, 1994; Heene et al., 2005; Hickey et al., 2005). It is puzzling that the current study did not find a similar association. Possible explanations for this incongruous findging are the sample used for the study, the measures used for assessment, and the variables used for analyses. For example, using a total sum score for the BSI to represent level of psychopathological symptoms may not be giving a clear representation of the subscales. Other limitations are explored further in the limitations sections.

However, this study does offer new insight to the literature it does support. The findings clearly demonstrated a strong correlation between the negative cognitions of the individual exhibiting psychopathological symptoms and his/her own relationship satisfaction. Just as Hoolley & Teasdale (1989) found that perceived criticism affected the functioning of the participants in their relationships, it is apparent that personal interpretation and how the individual views the partner and his/himself in the relationship affects the overall satisfaction levels. This finding has a direct impact on the practical

approach of therapy. It is apparent that a considerable portion of therapy should be focused on the cognitions of the couple, particularly the partner exhibiting psychopathological symptoms. Therapeutic interventions designed on these findings would better address the source of dissatisfaction. Because psychopathological symptoms are readily obvious, it would be easy to assume that they are causing the distress and affecting the levels of satisfaction. However, this study demonstrated that symptoms are not directly related to the quality of the relationship and that other potential variables are also affecting the dissatisfaction such as the cognitions of the partners in the relationship.

#### **Limitations**

There are various limitations to this study. The data are based on a clinical sample of couples who sought therapy for relationship problems. This has both disadvantages and advantages. One disadvantage is that typically these couples are in distress, are focused on problems in their relationship, and commonly have been thinking a lot about possible causes of their problems. This makes it difficult to generalize the findings to couples in the general public where one or both partners may experience psychopathological symptoms but the couple is not distressed and do not present to therapy for assistance. However, the advantage is that the sample allowed the study to have a wide range of mildly distressed to moderately distressed couples.

Another disadvantage of using this particular sample is that the couples who seek therapy at the Family Service Center (FSC) usually do so on the basis of their distress concerning their relationship (it is a marital and family therapy clinic), and the level of the partners' psychopathological symptoms does not tend to be severe in most cases. The FSC does not have the resources or expertise to deal with individuals with severe mental

conditions. In situations where a member of a couple has psychopathology that is beyond the level of expertise of the FSC therapists, the individual or couple is referred elsewhere. This policy eliminates the likelihood that couples where one partner is suffering from more severe psychopathological symptoms would be presenting to the FSC for treatment or staying long enough to complete all of the measures used in this study.

The combination of self-report measures used in this study also might have confounded the results. Using a total score for the BSI might confound the conditions and symptoms of the various psychopathological dimensions. The questions concerning the symptoms for the seven subscales on the BSI may cancel each other when the total score is summed. The BSI may be best used by looking at the totals of each subscale versus a total score for the entire measure.

In order to check on the validity of the data from the sample, the investigator conducted validation checks on the measures. The BSI individual subscale scores of paranoid, psychoticism, somatization, obessessive-compulsive, depression, anxiety, and phobia were used to test this validity. All of the subscales were significantly correlated with the Beck Depression Inventory. For example, both men and women exhibited higher levels of depression when they reported more psychopathological symptoms. However, there were no correlations between the BSI subscale scores and the level of depression in the partner. For example, if women exhibited greater levels of psychopathological symptoms, this was not correlated with men's depression nor was men's psychopathological symptoms correlated with women's depression levels. Despite this exploratory finding that correlations between the subscales of the BSI and the BDI do

exist, this study does not support the current literature that states that there is a direct correlation between psychopathological symptoms and relationship satisfaction.

#### Research Implications

The *SCI* and *MAS* are self-report measures that assess partners' cognitions as they deal with stress and conflict in their relationship but not with psychopathological symptoms themselves. It would be interesting to study the same relations between psychopathology and partner cognitions using different measures where the questions were inquiring about the partners' thoughts about the actual symptoms. Measuring the clinicians' ratings of clients' symptoms would add another element to the dimension. It would also be interesting if the same study was conducted with a different sample that included couples who exhibited more severe psychopathological symptoms or couples who had symptoms but were not distressed in their relationships.

Another approach to the same study would be to explore the *BSI* subscales individually as they relate to relationship satisfaction. For example, it would be interesting to test the correlation between separate *BSI* subscales (i.e., depression, somatization, phobia, anxiety, obsessive-compulsive, psychoticism, and paranoia) and the total *DAS* score. This would remove any possible confounding between the subscales and would reveal direct correlations, if they exist or not.

The *DAS* may not be the best measure to assess the overall relationship satisfaction as it pertains to the personal subjective responses to a partner's psychopathological symptoms. Another measure may be more precise in determining the various elements of a person's overall relationship satisfaction and what aspects of the relationship and individual are affecting that level and how it relates to symptoms. Along

these lines, perhaps symptoms are not a major determinant of the level of satisfaction. In fact, based on the findings in this study, the cognitions concerning relationship problems and conflict were related to the *DAS* but apparently how people think about the partner concerning relationship conflicts was more important in regard to relationship satisfaction than were the psychopathological symptoms of the sort experienced in this sample. Studies focused on further exploring the different aspects of relationship satisfaction and how they relate to psychopathological symptoms are needed.

#### **Clinical Implications**

This study offers valuable information to the clinical field as it relates to therapists working with distressed couples with psychopathological symptoms. The results showed that the focus of therapy should be on discussing and challenging negative attributions and cognitions more than removing the actual psychopathological symptoms. The study demonstrated the strong possibility that partners are not attributing stress within the relationship to psychopathology symptoms, but rather the meaningful cognitions involve how they view the other person in general, or themselves.

Along the same lines, another focus of therapy could be on the individual with the symptoms. For example, the results showed that when women reported psychopathological symptoms, they also reported lower relationship satisfaction. This shows that their relationship distress may not have as much to do with the partner directly as it does their own perceptions of the relationship. Therapists could discuss this in session and help clients take ownership of their symptoms and discuss how their symptoms are affecting their personal thinking processes (i.e., how the symptoms may be compromising their objectivity about their relationship). Analyzing how these mental

processes are affecting the behaviors between them and their partners would hopefully help the clients to experience more relationship satisfaction in spite of their psychopathological symptoms.

#### **Conclusion**

In conclusion, this study supports the current literature that women are more responsive to their partners, especially when they exhibit psychopathological symptoms. However, the study does not support the current literature that states that psychopathological symptoms directly affect the partners' overall relationship satisfaction. There are potential reasons why this was the case, and further study is warranted in this area to further clarify the impacts of psychopathological symptoms on couples' relationships and their levels of satisfaction.

Based on the results of the study, therapists should not overlook the power of cognitions. The exploration of both negative and positive cognitions of each partner would reveal a lot in terms of resolving or dealing with psychopathological symptoms and maintaining a certain level of relationship satisfaction.

## Appendices



## Appendix A

## **RSI**

Gender	r: Date of Birth:	Therapist Code	Family Code							
number	INSTRUCTIONS: Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select one of the numbered descriptors that best describes HOW MUCH DISCOMFORT THAT PROBLEM HAS CAUSED YOU DURING THE PAST MONTH INCLUDING TODAY. Write that number next to the question. Do not skip any item.									
EXAM	IPLE: HOW MUCH WERE YOU DISTRESSED BY:Body Aches	Descriptors:  0 Not at all 1 A little bit 2 Moderately	<ul><li>3 Quite a bit</li><li>4 Extremely</li></ul>							
HOW N	MUCH WERE YOU DISTRESSED BY:	23. Na	usea or upset stomach							
	1. Nervousness or shakiness inside	24. Fed	eling that you are watched or talked about by							
	_2. Faintness or dizziness		ouble falling asleep							
	3. The idea that someone else can control your thoughts		ving to check and double check what you do							
	_4. Feeling others are to blame for most of your troubles		fficulty making decisions							
	_5.Trouble remembering things		eling afraid to travel on buses, subways, or trains							
	6. Feeling easily annoyed or irritated	<del></del>	buble getting your breath							
	7. Pains in heart or chest		t or cold spells							
	8. Feeling afraid in open spaces		ving to avoid certain things, places, or activities							
	_9. Thoughts of ending your life		cause they frighten you							
	10. Feeling that most people cannot be trusted	32. Yo	ur mind going blank							
	11. Poor appetite	33. Nu	mbness or tingling in parts of your body							
	12. Suddenly scared for no reason	34. Th	e idea that you should be punished for your sins							
	13. Temper outbursts that you could not control	35. Fee	eling hopeless about the future							
	14. Feeling lonely even when you are with people	36. Tro	ouble concentrating							
	15. Feeling blocked in getting things done	37. Fee	eling weak in parts of your body							
	16. Feeling lonely	38. Fee	eling tense or keyed up							
	17. Feeling blue	39. Th	oughts of death or dying							
	18. Feeling no interest in things	40. Ha	ving urges to beat, injure, or harm someone							
	19. Feeling fearful	41. Ha	ving urges to break or smash things							
	20. Your feelings being easily hurt	42. Fee	eling very self-conscious with others							
-	21. Feeling that people are unfriendly or dislike you	43. Fee	eling uneasy in crowds							
	22. Feeling inferior to others	44. Ne	ver feeling close to another person							

4	5. Spells of terror or panic
4	6. Getting into frequent arguments
4	7. Feeling nervous when you are left alone
4	Others not giving you proper credit for your achievements
4	9. Feeling so restless you couldn't sit still
5	0. Feelings of worthlessness
5	1. Feeling that people will take advantage of you if you let them
5	2. Feelings of guilt
5	3. The idea that something is wrong with your mind.



### Appendix B

## **SCI**

Gender:	Date of Birth:	Therapist Code:
Family Code		

#### YOUR THOUGHTS

In general, when you experience disagreement or conflict in your relationship, or when you experience events that might lead to a disagreement, how do you typically react? *Please circle the number that indicates how often* **YOU** *have the following thoughts:* 

nave the following thoughts:	NT	D 1	0 ' 11	O.C.	X7 C
1. Let's work this out together		Rarely 2	Occasionally 3	Often 4	Very often 5
2. Go away; leave me alone	1	2	3	4	5
3. I give up; you win	1	2	3	4	5
4. I'll deal with it later	1	2	3	4	5
5. You've got no right to	1	2	3	4	5
6. We really get along well	1	2	3	4	5
7. I hate you	1	2	3	4	5
8. I'd better be quiet and go along	1	2	3	4	5
9. We'd better not get into this; avoid the subject	1	2	3	4	5
10. What the hell makes you think you can	1	2	3	4	5
11. I want to respect your thoughts and feelings	1	2	3	4	5
12. To avoid an argument I'd better give in	1	2	3	4	5
13. I want out	1	2	3	4	5
14. I won't deal with this	1	2	3	4	5
15. I'll get you back	1	2	3	4	5
16. I want to cooperate with you	1	2	3	4	5
17. I want to go away	1	2	3	4	5
18. I want to ignore this	1	2	3	4	5
19. I want to resolve our disagreement	1	2	3	4	5
20. I wish I weren't here	1	2	3	4	5
21. We should not be disagreeing	1	2	3	4	5
22. I want to do what I can to make this better	1	2	3	4	5
23. How can I get out of this?	1	2	3	4	5
24. I'll withdraw	1	2	3	4	5
25. You make me angry	1	2	3	4	5
26. I'll back off so it doesn't get worse	1	2	3	4	5
27. I should let you have your way	1	2	3	4	5
28. I should avoid the issue	1	2	3	4	5
29. I want to stop our disagreement	1	2	3	4	5
30. I should be quiet	1	2	3	4	5

## Appendix C



**MAS** 

Gender:	Date of Birth:	Therapist Code:	Family Code:
Please circle the the rating scale		w much you agree or disagree	with each statement this week, using
Rating Scale:			
2 = Agr 3 = Ner 4 = Dis	ongly agree ree somewhat atral agree somewhat ongly disagree		
1. When we ar	ren't getting along I wonder is	f my partner loves me	1 2 3 4 5
2. My partner	doesn't seem to do things jus	t to bother me	1 2 3 4 5
3. My persona	lity would have to change for	our relationship to improve	
4. My partner	intentionally does things to in	ritate me	1 2 3 4 5
5. Even if my	partner's personality changed	l we still wouldn't get along any	y better 1 2 3 4 5
6. It seems as	though my partner deliberate	y provokes me	1 2 3 4 5
7. If my partne	er did things differently we'd	get along better	1 2 3 4 5
8. My partner'	s personality would have to c	change for us to get along better	1 2 3 4 5
9. Any trouble	we have getting along with	each other is because of the type	e of person I am 1 2 3 4 5
10. I don't thin	k that the things I say and do	make things worse between us.	1 2 3 4 5
11. Any proble	ms we have are caused by the	e things I say and do	1 2 3 4 5
12. I don't thin	k our marriage would be bett	er if my partner was a different	type of person 1 2 3 4 5
13. Even if my	personality changed, my par	tner and I still wouldn't get alo	ng any better1 2 3 4 5
14. The way m	y partner treats me determine	s how well we get along	1 2 3 4 5
15. Whatever p	problems we have are caused	by the things my partner says an	nd does
16. My partner	and I would get along better	if it weren't for the type of pers	son he/she is
17. My partner	doesn't intentionally try to u	pset me	1 2 3 4 5
18. When thing	gs aren't going well between	us I feel like my partner doesn't	t love me
19. Whatever d	lifficulties we have are not be	cause of the type of person I an	n1 2 3 4 5
20. What diffic	culties we have don't lead me	to doubt my partner's love for	me1 2 3 4 5
21. When thing	gs are rough between us it sho	ows that my partner doesn't love	e me

## Rating Scale:

- 1 = Strongly agree 2 = Agree somewhat 3 = Neutral
- 4 = Disagree somewhat
- 5 = Strongly disagree

22. If I did things differently my partner and I wouldn't have the conflicts we have	2	3	4	5
23. My changing how I act wouldn't change how our marriage goes	2	3	4	5
24. I'm sure that my partner sometimes does things just to bother me	2	3	4	5
25. Even when we aren't getting along, I don't question whether my partner loves me	2	3	4	5
26. I think my partner upsets me on purpose	2	3	4	5
27. When my partner isn't nice to me I feel like he/she doesn't love me	2	3	4	5
28. I'm certain that my partner doesn't provoke me on purpose	2	3	4	5
29. Even when we have problems I don't doubt my partners' love for me	2	3	4	5
30. The things my partner says and does aren't the cause or whatever problems come up				
between us1	2	3	4	5
31. I doubt that my partner deliberately does things to irritate me	2	3	4	5



# DAS

Gei	nder: Date	e of Birth:	T	herapist Code:		Family Cod	le·
	st persons have disagreements i						
	ween you and your partner for e						_
			Almost			Almost	
		Always	Always	Occasionally	Frequently	Always	Always
		Agree	Agree	Disagree	Disagree	Disagree	Disagree
1.	Handling family finances						
2.	Matters of recreation						
3.	Religious matters						
4.	Demonstrations of affection						
5.	Friends						
6.	Sex relations						
7.	Conventionality						
8.	(correct or proper behavior) Philosophy of life						
9.	Ways of dealing with parents and in-laws						
10.	Aims, goals, and things believed important						
11.	Amount of time spent together						
12.	Making major decisions						
13.	Household tasks						
14.	Leisure time interests and activities						
15.	Career decisions						
		All the time	Most of the time	More often than not	Occasionally	Rarely	Never
16.	How often do you discuss or have you considered divorce, separatio or terminating your relationship?						
17.	How often do you or your partner leave the house after a fight?	ī					
18.	In general, how often do you thin that things between you and your						
	partner are going well?						
19.	Do you confide in your partner?						

			the me	Mos the t		More ofte than not		ionally	Rarely	Never
20.	Do you ever regret that you married (or lived together)?									
21.	How often do you or your partners	er								
22	quarrel?									
22.	How often do you and your part "get on each others' nerves"?	ner								
Hov	w often would you say the followi	ng events oc	cur betwe	en you ar	nd your i	mate? Circle	your answer.			
23.	Do you kiss your partner?									
	Everyday A	Almost every	day	Occa	sionally	Rar	ely Nev	er		
24.	Do you and your partner engage	in outside in	nterests to	gether?						
25.	ALL OF THEM MOST Have a stimulating exchange of	г оғ тнем ideas?	Some	OF THEM	VERY F	FEW OF THEM	None of th	EM		
		SS THAN E A MONTH		OR TWICE		E OR TWICE WEEK	ONCE A D	AY	More Often	
26.	Laugh together?									
		SS THAN E A MONTH		ONTH		E OR TWICE WEEK	ONCE A D.	AY	More Often	
27.	Calmly discuss something?									
		SS THAN E A MONTH		OR TWICE		E OR TWICE WEEK	ONCE A D.	AY	More Often	
28.	Work together on a project?									
		SS THAN E A MONTH		OR TWICE		E OR TWICE WEEK	ONCE A D.	AY	MORE OFTEN	
	ese are some things about which co						licate if either	item belo	ow causes differ	rences of opinion or
29.	Being too tired for sex.	Yes	No							
30.	Not showing love.	Yes	No							
31.	The dots on the following line rehappiness of most relationships.									
	EXTREMELY FAIRL UNHAPPY UNHAP		A LITTLE Unhappy		Нарр	Y	VERY Happy		REMELY APPY	PERFECT
32.	Which of the following statement you.  6. I want desperately for 5. I want very much for 4. I want very much for 3. It would be nice if my going.	my relation my relations my relations relationship	ship to suchip to suchip to succeede	cceed, and eceed, and eceed, and d, but I ca	d would I will do I will do an't do n	go to almost all I can to se my fair share nuch more tha	any length to be that it does. to see that it an I am doing	see that it does.	does.	
	My relationship can n	never succeed	d and the	re is no m	ore that	I can do to ke	en the relatio	nshin goi:	nσ	

## Bibliography

- American Psychological Association. (1994). *Diagnostic and statistical manual of mental disorders IV.* Washington, DC: American Psychological Association.
- Beach, S. R. H., Sandeen, E. E., & O'Leary, K. D. (1990). *Depression in marriage: A model for etiology and treatment*. New York: Guilford Press.
- Beach, S. R. H., Smith, D. A., & Fincham, F. D. (1994). Marital interventions for depression: Empirical foundation and future prospects. *Applied and Preventive Psychology*, 3, 233-250.
- Beck, A. T., Rial, W. Y., Rickets, K. (1974). Short form of Depression Inventory: Cross-validation. *Psychological-Reports* 34, 1184-1186.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Benazzi, F. (2006). Gender differences in bipolar-II disorder. *European Archives of Psychiatry and Clinical Neuroscience*, 256, 67-71.
- Benazon, N. R., & Coyne, J. C. (2000). Living with a depressed spouse. *Journal of Family Psychology*, 14, 71-79.
- Boulet, J., & Boss, M. W. (1991). Reliability and validity of the Brief Symptom Inventory. A Journal of Consulting and Clinical Psychology, 3, 433-437.
- Bradbury, T. N., Beach, S. R. H., Fincham, F. D., & Nelson, G. M. (1996). Attributions and behavior in functional and dysfunctional marriages. *Journal of Consulting and Clinical Psychology*, 64, 569-576.
- Breslin, F. C., Gnam, W., Franche, R., Mustard, C., & Lin, E. (2006). Depression and

- activity limitations: Examining gender differences in the general population. *Social Psychiatry and Psychiatric Epidemiology, 41,* 648-655.
- Brugha, T., Bebbington, P. E., Tennant, C., & Hurry, J. (1985). The list of threatening experiences: A subset of 12 life event categories with considerable long-term contextual threat. *Psychological Medicine*, *15*, 189-194.
- Christensen, A., & Sullaway, M. (1984). Communication patterns questionnaire.

  Unpublished manuscript: University of California, Los Angeles.
- Collins, N. L., & Reed, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personal and Social Psychology*, *58*, 644-663.
- Coyne, J. C., Thompson, R., & Palmer, S. C. (2002). Marital quality, coping with conflict, marital complaints, and affection in couples with a depressed wife. *Journal of Family Psychology*, 16, 26-37.
- Croake, J. W., & Kelly, F. D. (2002). Structured group couples therapy with schizophrenic and bipolar patients and their wives. *Journal of Individual Psychology*, 58, 76-86.
- Crowe, M. (2004). Couples and mental illness. *Sexual and Relationship Therapy*, 19, 309-311.
- Dalgard, O. S., Dowrick, C., Lehtinen, V., Vasquez-Barquero, J., Casey, P., Wilkinson,
  G., Ayuso-Mateos, J., Page, H., Dunn, G. (2006). Negative life events, social support and gender difference in depression. *Social Psychiatry and Psychiatric Edpidemiology*, 41, 444-451.
- Derogatis, L. R. (1977). The SCL-90 manual: Scoring, administration and procedures

- for the SCL-90. Baltimore: Johns Hopkins University School of Medicine, Clinical Psychometrics Unit.
- Derogatis, L. R., & Spencer, M. S. (1982). *The Brief Symptom Inventory (BSI)*:

  \*\*Administration, scoring, and procedures manual-1. Baltimore: Johns Hopkins

  University School of Medicine, Clinical Psychometrics Research Unit.
- Dutton, S. S. (2001). Marital relationship functioning in a clinical sampling of generalized anxiety disorder clients. Unpublished dissertation: University of Maryland, College Park.
- Eldridge-Randall, S. (1998). Observable differences between approving versus disapproving couples' interactions among high and low anxiety sensitive women.

  Unpublished dissertation: University of Connecticut.
- Eng, W., & Heimberg, R. G. (2006). Interpersonal correlates of generalized anxiety disorder: Self versus other perception. *Anxiety Disorders*, 20, 380-387.
- Epstein, N. B., & Baucom, D. H. (2002). Enhanced cognitive-behavioral therapy for couples: A contextual approach. Washington, DC: American Psychological Association.
- Fincham, F. D., & Bradbury, T. N. (1987). The impact of attributions in marriage: A longitudinal analysis. *Journal of Personality and Social Psychology*, *53*, 510-517.
- Fincham, F. D., & Bradbury, T. N. (1992). Assessing attributions in marriage: The Relationship Attribution Measure. *Journal of Personality and Social Psychology*, 62, 457-468.
- Forsterling, F., Schuster, B., & Morgenstern, M. (2005). Perspectives of causal

- attributions: A study of couples and depression. *Journal of Social and Clinical Psychology*, 24, 793-810.
- Graham, J. M., & Conoley, C. W. (2006). The role of marital attributions in the relationship between life stressors and marital quality. *Personal Relationships*, *13*, 231-241.
- Greene, L. I. (1998). The relationship of attributions and expressed emotion to outcome and marital satisfaction in patients with bipolar disorder. *DAI-B*, *59*, 1367-1367.
- Greenwalt, B. C. (2004). Treating difficult couples: Helping clients with coexisting mental and relationship disorders. *Family Journal*, *12*, 432-433.
- Heene, E. D., Buysse, A., & van Oost, P. (2005). Indirect pathways between depressive symptoms and marital distress: The role of conflict communication, attributions, and attachment styles. *Family Process*, 44, 413-440.
- Hickey, D., Carr, A., Dooley, B., Guerin, S., Butler, E., & Fitzpatrick, L. (2005). Family and marital profiles of couples in which one partner has depression or anxiety.

  \*\*Journal of Marital and Family Therapy, 31, 171-182.
- Hooley, J. M., & Teasdale, J. D. (1989). Predictors of relapse in unipolar depressives:

  Expressed emotion, marital distress, and perceived criticism. *Journal of Abnormal Psychology*, 98, 229-235.
- Ingoldsby, B. B., Smith, S. R., & Miller, J. E. (2004). *Exploring family theories*. Los Angeles, CA: Roxbury Publishing Company.
- Jackman-Cram, S., Dobson, K. S., & Martin, R. (2006). Marital problem-solving behavior in depression and marital distress. *Journal of Abnormal Psychology*, 115, 380-384.

- Jeglic, E. L., Pepper, C. M., & Ryabchenko, K. A. (2005). A caregiving model of coping with a partner's depression. *Family Relations*, *54*, 37-45.
- Johnson, S. M., & Denton, W. (2002). Emotionally focused couple therapy: Creating secure connections. In A. S. Gurman & N. S. Jacobson (Eds.), *Clinical handbook* of couple therapy (p. 221-250). New York, NY: Guilford Press.
- Jungbauer, J., Wittmund, B., Dietrich, S., & Angermeyer, M. C. (2004). The disregarded caregivers: Subjective burden in spouses of schizophrenia patients. *Schizophrenia Bulletin*, *30*, 665-675.
- Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Wittchen, H.-U., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the National Comorbidity Survey. *Archives of General Psychiatry*, *51*, 8-19.
- Kurdek, L. A. (1992). Dimensionality of the *Dyadic Adjustment Scale*: Evidence from heterosexual and homosexual couples. *Journal of Family Psychology*, 6, 22-35.
- Marcaurelle, R., Belanger, C., Marchand, A., Katerelos, T. E., & Mainguy, N. (2005).

  Marital predictors of symptom severity in panic disorder with agoraphobia.

  Anxiety Disorder, 19, 211-232.
- McLeod, J. D. (1994). Anxiety disorders and marital quality. *Journal of Abnormal Psychology*, 103, 767-776.
- Pretzer, J., Epstein, N., & Fleming, B. (1991). Marital attitude survey: A measure of dysfunctional attributions and expectancies. *Journal of Cognitive Psychotherapy:*An International Quarterly, 5, 131-148.
- Sayers, S. L., Kohn, C. S., Fresco, D. M., Bellack, A. S., & Sarwer, D. B. (2001). Marital

- cognitions and depression in the context of marital discord. *Cognitive Therapy* and *Research*, 25, 713-732.
- Schmaling, K. B., Whisman, M. A., & Fruzetti, A. E. (1991). Identifying areas of marital conflict: Interactional behaviors associated with depression. *Journal of Family Psychology*, *5*, 145-157.
- Schmaling, K. B., & Jacobson, N. S. (1990). Marital interaction and depression. *Journal of Abnormal Psychology*, 99, 229-236.
- Snyder, D. K., & Whisman, M. A. (2003). *Treating difficult couples: Helping clients with coexisting mental and relationship disorders* (Eds.). New York, NY: Guilford Press.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15-28.
- Stewart, S. E., Yen, C., Stack, D. E., & Jenike, M. A. (2005). Outcome predictors for severe obsessive-compulsive patients in intensive residential treatment. *Journal of Psychiatric Research*, 40, 511-519.
- Tower, R. B., & Krasner, M. (2006). Marital closeness, autonomy, mastery, and depressive symptoms in a U.S. Internet sample. *Personal Relationships*, *13*, 429-449.
- Uebelacker, L. A., & Whisman, M. A. (2005). Relationship beliefs, attributions, and partner behaviors among depressed married women. *Cognitive Therapy and Research*, 29, 143-154.
- Whiffen, V. E., Kallos-Lilly, A. V., & MacDonald, B. J. (2001). Depression and attachment in couples. *Cognitive Therapy and Research*, 25, 577-590.

- Whisman, M. A. (1999). Marital dissatisfaction and psychiatric disorders: Results from the National Comorbidity Survey. *Journal of Abnormal Psychology*, 108, 701-706.
- Whisman, M. A., Uebelack, L. A., & Weinstock, L. M. (2004). Psychopathology and marital satisfaction: The importance of evaluating both partners. *Journal of Consulting and Clinical Psychology*, 72, 830-838.
- Winton, C. A. (1995). Frameworks for studying families. Guilford, CN: Dushkin Publishing Group Inc.
- Witchen, H., Zhao, S., Kessler, R., & Eaton, W. (1994). DSM-III-R generalized anxiety disorder in the National Comorbidity survey. *Archives of General Psychiatry*, *51*, 355-364.