

ABSTRACT

Title of Document: DETERMINANTS AND BEHAVIORAL CORRELATES OF STATE-LEVEL ANXIETY IN CLINICAL COUPLE INTERACTIONS

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Extant research demonstrated that clinically diagnosable disorders such as depression and anxiety have detrimental effects on dyadic satisfaction in couple relationships, but studies have focused almost exclusively on trait-level emotional responses. Consequently, little is known about state-level emotional responses, including factors influencing negative emotional states during couple interactions, and associations between emotional states and the partners' subsequent communication behavior. This study investigated the associations between: (a) each partner's attachment security and negative attributions about the other's malicious intent for them; (b) the degree of state-level anxiety partners experience immediately before engaging in a discussion about a conflictual relationship issue; and (c) partners' use of constructive and destructive behaviors during the discussion. State-level anxiety mediated the relationship between partners' pre-existing attachment security and negative attributions about the partner and each partner's use of constructive and destructive communication. Implications for clinical assessment and intervention with state-level anxiety responses in distressed couples are discussed.

**DETERMINANTS AND BEHAVIORAL CORRELATES OF STATE-LEVEL
ANXIETY IN CLINICAL COUPLE INTERACTIONS**

By

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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
Masters of Science
2005

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Acknowledgments

I would like to thank the following people for their support, commitment, and contributions to this thesis project. I have no doubt that, without you, I could not have completed a project of this magnitude.

First, I would like to thank my family, specifically my parents Gregory and Patricia Stejskal. You have always believed in me, taught me to give my very best, and above all create work that makes me proud. Your undying devotion and support began a long time ago, but exists still in all that I endeavor to do.

I would also like to thank my Grandmother Mary Legate who passed away this year shortly before the completion of my thesis. You were so excited and proud of my pursuit of higher education. You have watched with pride and encouragement as I took advantage of opportunities that were never available to you.

I would also like to thank Dr. Sally Koblinsky. You have been a great supporter of this project as well as of me as a student. Knowing that you believed in me and wanted me to succeed made all the difference.

My advisor, Dr. Norman Epstein was instrumental in helping me find a topic that peaked my interest and satisfied my desire to make valuable contribution in the area of couples research. Your insight and expertise have been instrumental in allowing me to create this thesis. You generously contributed so much of time and knowledge to this project, and to the betterment of me as a student. Thank you.

My committee members, Drs. Elaine Anderson and Carol Werlinich have made it imperative that I think critically about my work and its implications. You were able to provide me with constructive criticism while still supporting me as a student. Your keen eye for detail, years of experience and expertise have added immeasurably to this project and my academic development. Thank you.

I would also like to thank my colleagues for their support of my work and its progression. In particular, Sarah Kursch, Ginger Newman, and Ashley Southard were amazingly supportive of me during this process. From sharing tips from their personal experience to helping me polish my final presentation; you made me feel grounded while exploring, at times, uncharted territory. Additionally, Brian Livelsberger generously donated his time and formatting knowledge to help me create this document.

Finally, I would like to thank my devoted husband, Cameron. You valued my ideas when I was uncertain. When I did not believe in myself, you saw my potential. You also allowed me to have the time and space I needed to formulate this project. Above all, you supported me through a project that detracted from the time and energy I could give you.

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Chapter 1: Introduction

Statement of the Problem

The significant role of emotions in relationships is receiving increased attention from theorists and researchers alike. “Emotions are like no other psychosociobiological construct in that they express the intimate personal meaning of what is happening in our social lives” (Lazarus, 2001, p. 6). Emotions are thought to result when a physiological arousal is linked cognitively with positive or negative subjective feelings the individual has about the arousal (Lazarus, 2001). The most recent and radical approach to emotion can be characterized as cognitive (Barlow, 2002). A common thread to these approaches is the recognition that emotions are conceptualized as being driving forces for “action tendencies whose purpose it is to motivate behavior related to survival of the species” (Barlow, 2002, p.54). Some behaviors, or action tendencies include “preparing for, avoiding, and escaping potentially dangerous” (p.54) or threatening events (Barlow, 2002). Emotions are the heart of anxiety and the motivating force for behaviors associated with anxiety (Barlow, 2002).

Recent literature on couples’ interactions has investigated how positive emotions in couples’ relationships contribute to intimacy. Positive emotions and experiences in couple relationships contribute to being “outgoing, expansive, friendly, more kindly, and helpful to others. ...When people are treated well and have positive experiences, they are likely to feel safe, secure, and self-confident” (Lazarus & Lazarus, 1994, p. 86). In the same vein, negative emotions, specifically anger and depression, have been found to detract from relationship satisfaction and contribute to

negative couple interactions. Negative emotions that detract from couples' relationships can range from clinically diagnosable syndromes such as depression to non-diagnosable chronic states such as levels of anger that fuel abusive behavior.

Although couple therapy often focuses on the enduring traits of each partner, their relationship, and their patterned responses, there is little research on *state-level* emotional responses that occur during the process of the couple's interactions. Furthermore, information is lacking about predisposing factors that influence the likelihood of negative emotional states occurring during couple interactions and the association between such emotional states and the occurrence of positive and negative communication between partners. This lack of research evidence is inconsistent with clinical practice in which therapists devote attention to and intervene with fluctuating emotional states in distressed couples' interactions. For example, therapy for abusive relationships is often focused on state-level anger and how to control this emotional response in an effort to reduce violence between partners.

Even though couple researchers have, for the most part, ignored state-level emotional responses between partners, researchers who study emotion have long recognized the important difference between emotional states and traits. Using factor analysis research, Cattell and Scheier (1961) identified the concepts of state anxiety (situational or state-dependent) and trait anxiety (a broader emotional response pattern across time and many situations). Spielberger and his colleagues (Gaudry & Spielberger, 1971; Spielberger, 1966, 1972a, 1972b) have further refined the distinction between the concepts of state anxiety and trait anxiety and developed tools for the operational measurement of these two types of anxiety (Spielberger, Gorsuch,

& Lushene, 1970). Spielberger et al. (1970) defined state anxiety as “a transitory emotional state or condition characterized by subjective feelings of tension and apprehension” occurring in conjunction with the activation of the autonomic nervous system (Spielberger et al., 1970; Gaudry, Vagg, & Spielberger, 1975). State anxiety is thought to “vary in intensity and fluctuate over time as a function of the amount of stress that impinges upon an individual” (Gaudry et al., 1975, p.331). In contrast, trait anxiety refers to relatively stable and enduring individual differences with regard to the degree to which individuals are prone to anxiety (Gaudry et al., 1975, p.331). Therefore, individuals high in trait anxiety will experience greater levels of state anxiety at a greater frequency than individuals lower in trait anxiety.

Although the concepts of state anxiety and trait anxiety have existed in the theoretical and research literature for over 30 years, clinically diagnosable trait-like anxiety disorders have been the primary focus in research on the role of anxiety in couples’ relationships. Even though basic clinical research on clinically diagnosable anxiety disorders does provide some relevant findings and methods that can be applied to research on state-level anxiety in couples’ relationships, to date researchers have not directly examined the interplay between anxiety at the state-level and relationship functioning.

In general, state-level anxiety (also called anxious affect) is regarded as a temporary emotional experience at a level that is not considered to meet criteria for a clinically diagnosable anxiety disorder according to the Diagnostic Statistical Manual (DSM-IV-TR; American Psychiatric Association, 2002). Nevertheless, the DSM-IV-TR does recognize that state-level anxiety can reach debilitating levels in conjunction

with other disorders (DSM-IV-TR; American Psychiatric Association, 2002). For example, the adjustment disorder diagnoses recognize a component of state-level anxiety that can involve impairment of work performance and interpersonal relationships, as well as symptoms such as suicidal thoughts and behavior, substance abuse, and somatic complaints (DSM-IV-TR; American Psychiatric Association, 2002). To the extent that marital conflict triggers at least moderate levels of state anxiety in addition to partners' dissatisfaction with their relationship, state anxiety can serve as a threat to the partners' personal well-being as well as to each partner's degree of relationship satisfaction. If such state anxiety also results in negative behavior between partners, it may contribute to further deterioration of the relationship.

Vulnerability factors for anxiety in couple relationships. Although state anxiety has received little attention from couple relationship researchers, researchers investigating attachment in couples' relationships have identified anxiety as a negative emotion that can contribute to relational problems. Attention to secure and insecure attachments in couple relationships has been focused on the role of partners' attachment styles in couple relationships as predictors of partners' behavior toward each other. Bartholomew and Horowitz (1991) conceptualized four attachment prototypes by examining positive and negative beliefs or working models about the self's lovability in conjunction with positive and negative beliefs about others, specifically the accessibility of one's partner during times of need. These four attachment prototypes consist of secure attachment, and three attachment styles that are characterized as insecure: dismissing attachment, preoccupied attachment, and

fearful attachment (Bartholomew & Horowitz, 1991). Secure attachment is characterized by a positive view of the self as well as a positive view of the other's (in this case, the partner's) accessibility during times of need (Bartholomew & Horowitz, 1991). Dismissing attachment is also comprised of a positive self-image, but a negative appraisal of the partner who is often seen as unreliable and inaccessible (Bartholomew & Horowitz, 1991). Individuals who endorse preoccupied attachment view themselves negatively, often as being unworthy of love, but view their partner positively, often leading to hyper vigilance and concern that they might lose their relationship with their partner (Bartholomew & Horowitz, 1991). Finally, fearful attachment consists of negative views of both the self and the partner, often manifested in a fear of rejection and negative expectancies about the partner's availability (Bartholomew & Horowitz, 1991).

Pistole and Arricale (2003) also examined attachment prototypes and found that individuals engaged in a romantic relationship (85% of their participants reported being in a significant romantic relationship) who endorsed a secure attachment style on a self-report questionnaire reported significantly less "fighting" and more effective arguing than individuals endorsing fearful attachment. Securely attached individuals also experienced less threat during arguments than individuals who endorsed either a fearful or preoccupied attachment style (Pistole & Arricale, 2003). Creasey (2002) supported previous research studies on attachment when the interplay between internal working models of attachment and conflict management behaviors were examined in a sample of young adults involved in a significant romantic relationship. Internal working models of attachment were classified using the Adult Attachment

Interview (AAI; George, Kaplan, & Main, 1996) in which each partner answered questions designed to access each individual's past attachment experiences. Using the AAI, participants were placed in one of three attachment classifications (here fearful attachment was not discussed): secure, dismissing, and preoccupied (Creasey, 2002). This study found that internal working models of attachment "predict the emotional content of discussions during conflict management" (p.372) in that women who reported secure internal working models of attachment used more positive behavior and less negative behavior during disagreements with their partner than their insecurely attached female counterparts (Creasey, 2002). Alternately, men who reported more insecure attachment styles, namely dismissing or preoccupied internal working models of attachment, displayed a greater frequency of negative behaviors during disagreements with their partner than their more securely attached male counterparts (Creasey, 2002).

Drawing on Bowlby's attachment theory, Riskind and Williams (2004) have taken research on attachment style one step further, examining the interplay between insecure adult romantic attachment and cognitive vulnerabilities to anxiety and depression. Though a multitude of studies have examined individual's attributions concerning the internal, stable, and global causes of negative life events that are related to the experience of depression (e.g., Abramson, Metalsky, & Alloy, 1989; Alloy, Just, & Panzarella, 1997; Beck, 1967; Seligman, 1975), few research studies have examined maladaptive global cognitive styles as they relate to the development of anxiety (Riskind & Williams, 2004). Although global cognitive styles explain depressed individuals' organization of past information regarding experiences such as

loss, cognitive styles associated with global anxiety are concerned with the ways in which individuals “process, elaborate, and simulate anticipated future threat” (Riskind & Williams, 2004, p. 10). According to Riskind and Williams (2004), Bowlby’s working models of other can also be conceptualized as relational schemas acting in the same way as other cognitive schemas such as the organization of information. In this sense, a secure attachment style (more positive relational schema) is thought to act as a buffer against psychological symptoms and distress. Therefore, Riskind and Williams (2004) posit that individuals endorsing an insecure attachment style also have an increased cognitive vulnerability to depression *and* anxiety. The model of cognitive vulnerability to anxiety or “looming maladaptive style” (LMS) involves a *danger schema* that leads individuals to anticipate negative events (Riskind & Williams, 2004). Individuals subscribing to the LMS “formulate mental representations of rapidly intensifying threat or danger” (p. 10) causing anxiety provoking responses even when such responses may not be warranted in the context of the individual’s environment (Riskind & Williams, 2004). Therefore, individuals experience higher levels of anxiety based on the way in which they interpret events in their environment, and individuals subscribing to the LMS danger schema are actually more vulnerable to perceiving anxiety provoking stimuli in their environment than other individuals who do not subscribe to this schema (Riskind & Williams, 2004).

Riskind and Williams (2004) were able to identify insecure attachment as a precursor to the development of cognitive vulnerability to anxiety, in that individuals that reported insecure attachment were more cognitively vulnerable to anxiety and

were higher in LMS processing than individuals that reported a secure attachment (Riskind & Williams, 2004). In their relationships, these insecurely attached individuals had increased negative perceptions of the romantic relationship, decreased positive perceptions of the relationship, lower relationship satisfaction, and a decreased probability of being in a romantic relationship (Riskind & Williams, 2004). Although Riskind and Williams (2004) were able to identify negative attributions made and satisfaction appraised by individuals who reported an insecure attachment and were more cognitively vulnerable to anxiety, their research did not examine specific behaviors that occurred in the context of these individuals' relationships. The aims of the present study include expanding on Riskind and Williams' (2004) research and gaining an understanding of how state-level anxiety is associated with partners' negative cognitive sets regarding their attachments in relationships, and to examine the manner in which state-level anxiety manifests itself in couples' interactions in the form of constructive and destructive behaviors when the couple discusses a slightly to moderately conflictual relationship issue.

A second factor related to cognitive vulnerability to anxiety in couple relationships may involve attributions or inferences that partners make about the causes of problems in their relationships. There is a large body of research indicating that individuals who make negative attributions involving their partners' characteristics are more distressed in their relationships than those who make more benign attributions (see Epstein & Baucom, 2002 for a review). Those who attribute relationship problems to their partner's negative traits are less happy in the relationship and behave more negatively toward their partners (Epstein & Baucom,

2002). Unfortunately, past studies have not specified the types of negative emotion (other than anger) experienced by individuals who make such negative partner attributions about their partner. It is not known whether or not such negative attributions lead to state anxiety responses that may also require attention in the context of clinical assessment and treatment. Consequently, there is a need for research on the relationship between partners' negative attributions about each other and their experience of state anxiety during their couple interactions. Theorists and researchers have identified perceived threat of psychological or physical harm as the core cognitive component of anxiety. When one member of a couple perceives the partner as having malicious intent or a lack of love for them, these negative attributions suggest a perceived threat from the partner (Beck & Emery, 1985; Lundgren, Jergens, & Gibson, 1980; Riskind & Williams, 2004). Therefore there is good reason to hypothesize that negative attributions made about the partner's motives will be associated with anxiety.

Purpose

The purpose of this study is to expand upon the current knowledge on state-level anxiety in couples' relationships. Current literature on couple relationships falls short of appropriately addressing state-level anxiety in the sense that much of the work that has been done on anxiety and stress reactions in couples' relationships has focused on clinically diagnosed anxiety disorders (e.g., panic disorder). Additionally, researchers have concentrated on specific dyadic problems (e.g., stress regarding a spouse with a drug or alcohol addiction) or temporary life changes or crises (e.g., the birth of the first child or the death of a spouse) (Lundgren et al., 1980; McGrath,

1970). In particular, there is little known about the impact of partners' state anxiety responses within couple interactions. Specifically, the experience of state anxiety may be associated with the constructive and destructive behavioral patterns that couples employ while discussing conflictual issues in their relationship. This study is based on the premises that (a) relatively stable characteristics of the partners make them more vulnerable to experiencing anxiety in response to relationship conflict, (b) anxiety has an impact on ongoing couple interaction, and (c) knowledge about the predictors and behavioral consequences of anxiety responses is important for clinical assessment and intervention in couple therapy. Though this study will not explore the relationship between each partner's attachment security and each partner's negative attributions about the partner, it is important to note that, it seems from a systemic standpoint, that there is likely an interaction between these two variables.

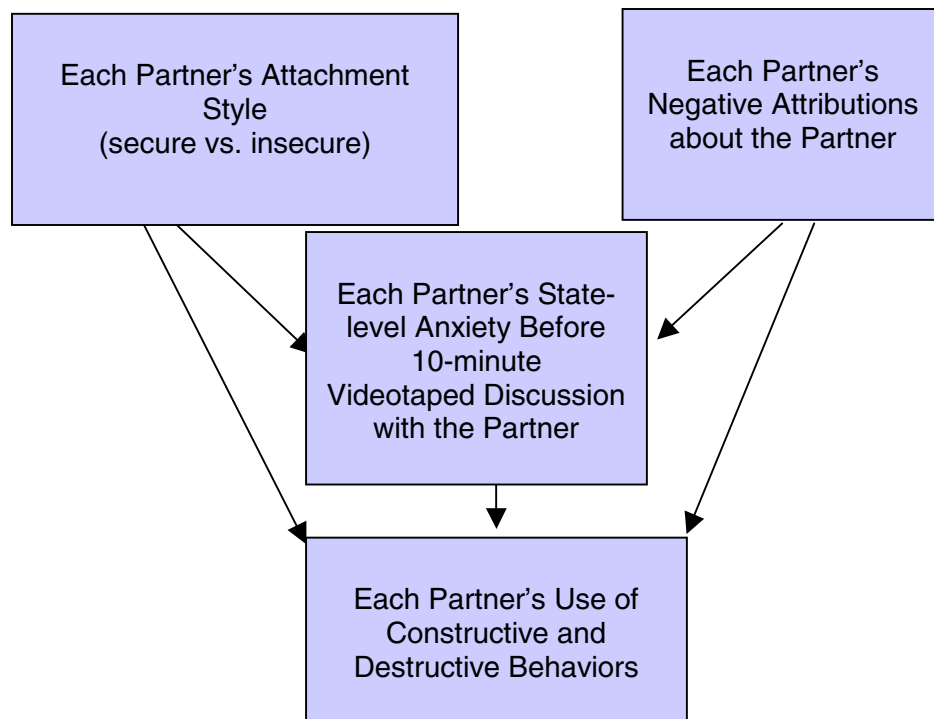


Figure 1 Model of Anxiety as a Mediator in the Relationship Between Attachment Style (secure versus insecure), Negative Attributions Made by Each Partner About the Partner's Intent, and the Use of Constructive and Destructive Behaviors During a Discussion About a Slightly to Moderately Conflictual Issue in the Relationship

This study is designed to identify the degree to which partners' existing personal characteristics are associated with the level of state anxiety that they each experience in anticipation of engaging in a discussion of a conflictual topic with each other. Furthermore, the study will examine the extent to which such anxiety is associated with each partner's utilization of constructive versus destructive behavior during a discussion about a slightly to moderately conflictual relationship issue.

The personal characteristics to be examined are partners' *attachment style* (secure versus insecure) and their *general negative attributions about characteristics of the other partner* (malicious intent and a lack of love) that they believe contribute to their relationship problems. Insecure attachment styles and negative attributions about the partner will be examined as cognitive vulnerabilities to the experience of state anxiety before couple interactions. In turn, state anxiety will be investigated as a predictor of observable constructive and destructive behavior during the couple's discussion of a relationship issue. Additionally, partners' self-reports of marital satisfaction will be examined solely for the purposes of understanding the extent to which the study's clinical sample was distressed in their relationship. Partners' attachment style (insecure versus secure) and the extent to which individuals make negative overall attributions regarding their partner's degree of malicious intent and love for them during conflictual situations will be the independent variables. The reported attachment styles and attributions will be used to predict the mediating variable of partners' state-level anxiety experienced before engaging in a discussion with their partner about a slightly to moderately conflictual issue in their relationship. The degree to which state anxiety mediates the relationship of each partner's insecure attachment and negative attributions about their partner with their degree of constructive and destructive behavior during a discussion of a conflictual relationship issue will be examined. The degree to which controlling statistically for anxiety reduces the relations between the variables of attachment and attributions and the partners' behavior with each other will be tested.

The absence of attention to state-level anxiety in marital relationships is noteworthy considering that Baucom and Epstein (2002) identify anxiety as one of three negative emotions thought to adversely affect marital satisfaction. Specific guidelines for interventions to address heightened, non-clinically diagnosable state anxiety within couples' relationships are lacking. It is likely that the dearth of clinical guidelines for addressing state-level anxiety in couples' relationships is a reflection of the lack of empirical information that exists in the couples' literature regarding anxious affect. This study is intended to help fill this important gap in the literature.

Review of Literature

The Physiological Arousal Component of Anxiety

Anxiety is "often marked by such physical symptoms as tension, tremor, sweating, palpitation, and increased pulse rate" (Beck & Emery, 1985, p. 9). According to the Diagnostic Statistical Manual (DSM IV-TR; American Psychiatric Association, 2002), many anxiety disorders, including agoraphobia, generalized anxiety disorder, and specific phobias are often accompanied by the presence of uncomfortable and debilitating panic attacks during which the individual often reports severe discomfort to the point that they fear they are having a heart attack and will die (Beck & Emery, 1985). The DSM-IV-TR describes panic attacks as having a sudden onset and being accompanied by at least 4 of 13 somatic or cognitive symptoms: heart palpitations, sweating, trembling or shaking, sensations of shortness of breath or smothering, feelings of choking, chest pain or discomfort, nausea or abdominal distress, dizziness or lightheadedness, derealization or depersonalization, fear of losing control or "going crazy", fear of dying, paresthesias, and chills or hot flashes (American Psychiatric Association, 2002). Consequently, individuals who suffer from anxiety disorders

with panic attacks report going to extreme measures to avoid panic-evoking stimuli in an effort to avoid the extremely uncomfortable symptoms that accompany panic (American Psychiatric Association, 2002). For example, individuals diagnosed with agoraphobia may stay in their home, avoiding physical contact with the outside world to the point that they do not participate in instrumental activities such as grocery shopping needed to sustain themselves.

Similarly, couples experiencing a less intense version of anxiety in the form of state anxiety (a person may experience up to three symptoms of panic attacks without being clinically diagnosed according to the DSM-IV-TR), may avoid interactions with their partner around conflictual issues as a means of also avoiding the unpleasant physiological symptoms that can accompany the onslaught of state-level anxiety.

The Cognitive Component of Anxiety

The conceptualization of cognitive components of emotions has been a relatively recent and significant development (Barlow, 2002). A cognitive-behavioral model guides this research study, and state-level anxiety will be examined through the lens of cognitions as mediating factors for emotions. One of the most prominent cognitive-behavioral theories of emotion, appraisal theory, has received attention from multiple theorists. This theory was first proposed in Schachter and Singer's (1962) initial publication suggesting that generalized physiological arousal may be experienced and reported differently depending on the context within which the individual experiences the arousal. That is, individuals consider the context in which they notice arousal to determine the appropriate label for their arousal (Schachter & Singer, 1962). For example, the arousal felt when stepping out in front of a moving

car is likely to be described as fear, whereas the same level of arousal during an argument might be interpreted and described by the same individual as anger.

Therefore, according to Schachter and Singer (1962) the essential piece in understanding emotion is recognizing the process by which an individual appraises a situation to form a perception of an (initially) undifferentiated arousal state (Barlow, 2002).

Building on Schachter and Singer's theory, Lazarus (1968), argued that individuals view changes in their environment as having a potential impact on them, and then use the appraisal of the potential impact to determine the nature of their emotional response (Lazarus, 1968, 1991; Lazarus, Averill, & Opton, 1970). Following this rationale, Lazarus and Folkman (1984, 1987) used a cognitive-relational theory to examine emotion and coping by exploring the transactional relationship between the individual, environment, cognitive appraisal, and coping mechanisms. The premises of this model are that the individual and the environment are two basic subsystems and have a relationship with one another (Lazarus & Folkman, 1987). For example, threat is not a property of the individual or the environment independently; instead, both subsystems are needed in order for threat to be appraised: an individual who appraises threat in his environment and an environment that possesses stimuli that the individual appraises as threatening (Lazarus & Folkman, 1987). The key is that the individual perceives the environment as threatening, whether or not an objective observer perceives an actual threat. For example, a person afraid of sharks may perceive the ocean as threatening and choose not to swim in deep areas, even if there are no sharks (threats) actually present. Lazarus and Folkman (1987) have

investigated coping as a process-oriented mechanism involving change over time and across situations by examining the types of coping mechanisms that actually take place in a particular context over multiple segments of time (Lazarus & Folkman, 1987). Additionally, Lazarus and Folkman's (1987) systemic approach to emotion is important given that emotion cannot be adequately defined without examining the internal (e.g., personal antecedents such as belief systems, goals, and hierarchy) and external (e.g., environment stimuli such as demands, constraints, and resources) factors as well as the mediating processes of appraisal and coping.

As a mediating process, cognitive appraisal is used by humans and animals to evaluate their environmental stimuli as it pertains to their well-being (Lazarus & Folkman, 1987). The two types of appraisal; primary and secondary, should be distinguished from one another in that they attend to differing sources of information (Lazarus & Folkman, 1987). Primary appraisal is concerned with assessing whether or not something is germane to an individual's well-being and includes three types of stress appraisals: (1) Harm, a threat to the individual's well-being that has already been experienced, (2) Threat, anticipated future harm, and (3) Challenge, a potential for mastery or gain that requires some risk for harm and for which an individual mobilizes resources to cope with obstacles in order to produce a positive outcome (Lazarus & Folkman, 1987). Primary appraisal is often thought of in terms of what is at stake in a given encounter (Lazarus & Folkman, 1987). If there is nothing at stake, the encounter is irrelevant to personal well-being, and coping resources as well as an emotional reaction will not occur (Lazarus & Folkman, 1987). Conversely, if an individual has a vested stake in a given encounter, the degree to which coping

resources (i.e., the quality and intensity of the emotional reaction) are mobilized will correspond with what and how much is at stake (Lazarus & Folkman, 1987). In addition to stakes, secondary appraisal is used to evaluate the coping strategies the individual can engage in to improve a given encounter (Lazarus & Folkman, 1987). Secondary appraisal is a vital supplement to primary appraisal in that the appraisal of harm, threat, and challenge depends on how much control an individual thinks they exert over an encounter's outcome (Lazarus & Folkman, 1987). That is to say that if individuals are confident in their ability to cope with the encounter and prevent a damaging outcome, the appraisal of threat or harm is likely to be minimal or even absent (Lazarus & Folkman, 1987). For example, perhaps the person who is afraid of sharks is a surfer. He or she has never seen a shark while surfing (i.e., has no experience of past harm), but is afraid of encountering a shark that will attack him or her in the future (i.e., he anticipates future threat and harm). This surfer enjoys the sport very much (i.e., there is potential for mastery or gain that requires some risk for harm), and therefore, straps a dive knife to his or her ankle when surfing to prepare for a shark attack (i.e., resources are mobilized to cope with anticipated harm in order to produce a positive outcome).

Coping has been traditionally viewed as being associated with emotion in that coping arises from an appraisal of harm, threat, or challenge accompanied by anxiety, and it transforms the appraisal into an emotional response (Lazarus, 1968; Lazarus & Folkman, 1987). Coping mechanisms are thought to have two functions, that along with primary and secondary cognitive appraisals, mediate short-term emotional responses: (1) Coping mechanisms change the actual interaction between the

threatening, harmful, or challenging environment and individual (problem-focused coping), and (2) Coping mechanisms regulate emotional distress (emotion-focused coping) (Lazarus & Folkman, 1987). A consistent finding is that context or the way individuals appraise their environment using primary appraisal (i.e., Is there a threat to an individual's well-being, and what is at stake in this encounter?) and secondary appraisal (i.e., Can the individual employ coping mechanisms to mediate the encounter's outcome, and how confident is the individual in his ability to cope with a given encounter?) was integral in shaping the type of coping response the individual exhibited (Lazarus & Folkman, 1987). For example, an individual who appraises an encounter as a threat to his or her self-esteem is characterized by a greater use of escape avoidance coping as well as confrontive coping (Lazarus & Folkman, 1987).

Although Lazarus and Folkman's (1987) theory places a strong emphasis on initial perception (i.e., primary appraisal), as well as an individual's cognitive elaboration of perception (i.e., secondary appraisal), the model encountered difficulty explaining irrational responses that were not based on realistic appraisals of an individual's environment (Barlow, 2002). Therefore, Lazarus and Folkman's (1987) theory would have a hard time explaining the surfer's anxiety about going in the ocean if no sharks were present. In order to explain an individual's irrational emotional response(s) to the environment (i.e., responses to threat or danger when there is not actual threat or danger present), one must further examine cognitive appraisal and its interplay with an individual's cognitive schemas (Beck & Emery, 1985). Cognitive schemas orient individuals to select and attend to the information from the environment that they believe is most relevant (Beck & Emery, 1985).

When a specific cognitive schema (e.g., an individual's set of experiences with and beliefs about toothpaste) or constellation of cognitive schemas (e.g., a more complex grouping of beliefs, rules, and assumptions used to evaluate concepts such as human rights) is activated, it influences how the individual perceives information, as well as the ability to label and interpret environmental stimuli (Beck & Emery, 1985). When cognitive schemas become "hypervalent," (p.55) individuals experience a type of "tunnel vision" (p.55) in which information that does not support or fit the existing cognitive schema(s) is not attended to during an individual's appraisal of the environment (Beck & Emery, 1985). Individuals prone to anxiety often employ cognitive schemas that are primarily organized to prepare for danger, tend to focus on stimuli in the environment that could pose a threat, and exclude from the appraisal other protective factors (such as safety or support). This approach creates an appraisal of a situation as dangerous, when in fact it may pose little or no threat at all (Beck & Emery, 1985). So, a person's cognitive appraisal of the environment, realistic or irrational, guided by the preexisting cognitive schemas determines whether or not the person has the subjective experience of anxiety (Beck & Emery, 1985).

The Development of Trait Anxiety as a Stable Cognitive-Affective Structure

In his State-Trait Anxiety theory, Spielberger (1966, 1972a, 1972b) defines state anxiety as the subjective experience of tension accompanied by activation of the autonomic nervous system at one point in time. In contrast, trait anxiety reflects relatively stable individual differences in susceptibility to the frequency and intensity with which an individual experiences state-level anxiety over time (Guadry et al., 1975). State-level anxiety is an experience of anxiety within a specific time period or

environment resulting from perceived threat or danger, whereas trait anxiety refers to a marked increase of frequency and duration of state-level anxiety across multiple time frames and environments in which threat and danger are perceived (Guadry et al., 1975; Spielberger 1966, 1972a, 1972b). It is important to note that when higher degrees of trait anxiety (the experience of a greater frequency and duration of state-anxiety) have manifested themselves in the past, the probability is increased that state-level anxiety will also be experienced at higher degrees and with greater frequency in the future (Guadry et al., 1975; Spielberger 1966, 1972a, 1972b). Compared to lower levels of trait anxiety, high levels of trait anxiety are supported by cognitive schemas that organize and process environmental stimuli in such a way that one's susceptibility to anxiety across time is increased as these individuals perceive a larger number of situations as threatening or dangerous (Beck & Emery, 1985).

Given that it is impossible to attend to all information in a particular environment; cognitive schemas are an essential means by which a person extracts meaningful and relevant information from the environment (Beck & Emery, 1985). Cognitive schemas are also adaptive in that they allow an individual to obtain the greatest amount of relevant information from a given environment and process that information in the shortest amount of time (Beck & Emery, 1985). In the case of trait anxiety, cognitive schemas that influence an individual's appraisal of the environment direct a person to selectively attend to the information that fits within the constraints of the person's cognitive schema, namely potential danger and threat (Beck & Emery, 1985). This schema creates a continuous cycle or relatively stable cognitive-affective structure supported by a feedback loop where a person's cognitive

schema(s) is oriented toward threatening and dangerous aspects of a person's environment, and therefore, attends to information from the environment that is perceived as threatening or dangerous, supporting the schema that the environment is in fact dangerous (Beck & Emery, 1985). The individual then responds to the threatening environment by experiencing state-level anxiety, which is often accompanied by uncomfortable and intrusive physiological manifestations (e.g., sweating, feeling suffocated, etc.), reinforcing the individual's belief that the environment holds many threats and dangers to one's well being (Beck & Emery, 1985).

In the case of couple relationships, another stable cognitive structure is the general attachment style each partner exhibits (i.e., working model of attachment). Each partner's working model of attachment, though malleable during childhood, is thought to become a more stable cognitive structure during adulthood, mediating interpersonal behavior and emotional regulation in intimate relationships (Bowlby 1980, 1988; Hazan & Shaver, 1987; Rholes, Simpson, & Orina, 1999). Additionally, working models of attachment, like cognitive schemas, are thought to regulate individual beliefs about the capacity for love as well as the availability of the partner (Bartholomew & Horowitz, 1991). Therefore, individuals perceive the relationship through the lens of their working model of attachment.

There is evidence indicating that individuals who report an insecure working model of attachment, are predisposed to view their partner's actions more negatively, creating a subjective experience of anxiety during conflictual interactions with their partner. Supporting this claim, Pistole and Arricale (2003) found that individuals

with an insecure attachment were more likely to interpret arguments with their partner as threatening, and reported more fear and avoidance during arguments. Therefore, individuals who report more insecure working models of attachment are more susceptible to experiencing greater levels of state-anxiety during arguments with their partner (Pistole & Arricale, 2003). It stands to reason, that continued anxiety provoking interactions with one's partner could create, over time, a cognitive schema that supports higher levels of state anxiety by appraising one's partner as threatening or dangerous during conflictual interactions. Given that one or both partners report a more insecure working model of attachment and experience heightened anxiety during interactions with the partner, they may make more negative attributions about their partner, specifically regarding their partner's degree of love for them and interpret their partner's intentions as malicious. If one partner views their partner's behavior negatively (e.g., "He said that because he does not love me anymore," or "She walked away because she is trying to get me back."), these interpretations will serve to enhance one's cognitive schema that the partner is threatening or dangerous. Given that one or both partners appraise their spouse as dangerous or threatening, they are then predisposed to experience an elevated degree of state-level anxiety during conflictual interactions, creating a positive feedback loop to support their cognitive schema.

Barlow's Model of Uncontrollability and Anxiety

Barlow (1998; 2002) postulates that anxiety is characterized by a cognitive-affective structure that can occur without a conscious or rational appraisal. At the core of Barlow's cognitive-affective model of anxiety (1998; 2002), negative affect is

associated with a cognitive appraisal of uncontrollability and unpredictability (a perceived inability to manipulate events) that is focused on the potential for future threat or danger. Negative affect also can be characterized as a state of helplessness because of the individual's perceived inability to control future events or outcomes in personally salient events (Barlow, 2002). The negative affect state is also accompanied by a state of self-preoccupation or evaluation in which one is prominently focused on perceived ineptitude for responding to future threatening situations (Barlow, 2002). Another characteristic of this model is an individual's hyper-vigilance that creates a constant elevated arousal to facilitate a state of "readiness" to deal with future threat or danger and to counteract the individual's perceived helplessness (Barlow, 2002). People that experience anxiety, state-level or otherwise, believe that a terrible or catastrophic event can occur or recur, and though there is a perceived inability to influence the event, individuals experiencing anxiety maintain a heightened level of arousal associated with an attempt to be "ready" when the event does occur or recur. For this reason, anxiety, also called anxious apprehension, is a "future-oriented" cognitive-affective state in which one continues to prepare for perceived imminent threat (Barlow, 2002).

It is important to note that one might experience anxiety, state-level or otherwise, without being aware of a specific trigger such as a smell, object, or situation that represents an earlier trauma or a situation in which an individual previously felt threatened (Barlow, 2002). In this way, the process of anxious apprehension can occur in conjunction with a variety of cues without a conscious or rational appraisal of a situation (Barlow, 2002). Additionally, Barlow (2002)

suggests that an individual's focus on his or her ability to mobilize resources against a threatening situation serves to intensify arousal and negative affect, which in turn narrows the individual's attention to sources of threat or danger. This focusing of attention on potential threats then sets the stage for distortions to occur in information processing, reinforcing preexisting cognitive schemas about existing sources of danger (Barlow, 2002).

For example, a male who had a very emotionally difficult time when his previous girlfriend broke up with him unexpectedly may experience significant arousal when he enters into a subsequent relationship, in that he now anticipates and wants to be prepared when this new girlfriend unexpectedly breaks up with him. As his negative arousal increases in response to the perceived threat of an unexpected break-up, he may process information about his relationship through attentional biases (e.g., looking for small indicators or clues that his girlfriend is dissatisfied with the relationship) and/or interpretive biases (e.g., when his girlfriend says that she is tired and does not want to go out, he may attribute it to her being dissatisfied with him).

Looming Maladaptive Style (LMS) as a Cognitive Vulnerability to State-level Anxiety

Riskind, Williams, Gessner, Chrosniak, and Cortina (2000) theorize that the most anxiety-provoking situations occur when individuals perceive danger and threat as rapidly mounting and intensifying as it approaches them. These perceptions have been labeled by Riskind and colleagues as looming vulnerability, implying that as individuals process information from their environment, anxious responses intensify as individuals' conceptions of the immediacy and magnitude of the threat increases.

Therefore, in order for a cognitive model of anxiety to be complete, it must consider individuals' dynamic appraisals and expectations about aspects of threat (Riskind et al., 2000). In this way the looming maladaptive style (LMS) model differs from conventional theories of anxiety in that it presupposes that the perceptions of threat or danger are antecedents to anxiety, in the sense that this model emphasizes the dynamic nature of psychologically threatening situations (Riskind et al., 2000). Although multiple cognitive mediation models of anxiety were drawn upon to conceptualize anxiety for this particular study, the LMS model of anxiety primarily guides this study.

Riskind and colleagues (2000) propose that much of the information that an individual draws upon to form an appraisal of imminent threat and its severity is processed automatically and non-reflectively as individuals draw on memories, beliefs, attitudes, and concepts from past experiences to complete their evaluation of the situation. This model posits that appraisals of looming potential threat represent an evolutionarily derived process of a threat/harm appraisal that elicits anxiety (Riskind et al., 2000). From an evolutionary perspective, the lack of habituation to anxiety allows individuals to attempt to prevent disastrous outcomes, as sensitization to threat alerts a person to signs of potential danger in the environment (Riskind, 1997; Williams & Riskind, 2004). The concept of looming danger has been postulated to be a central theme discriminating anxiety and phobias from depression and is based in social-cognitive and evolutionary perspectives (Riskind, 1997). Although awareness and response to looming dangers has an adaptive value for survival, individuals who develop a trait-like global LMS tend toward inaccurate

appraisals about the temporal and spatial progression of potential threats (Riskind et al., 2000). The LMS can have detrimental effects on the individuals who employ this cognitive model in the sense that it can lead to the intensification of perceived danger scenarios that might otherwise be considered harmless, mundane, or non-threatening (Riskind et al., 2000). As a trait-like danger schema, the LMS produces biases in the selection, interpretation, and recall of potential threats that results in individuals evaluating situations as more threatening and dangerous than individuals not employing this schematic processing model (Riskind et al., 2000).

Numerous studies have examined the validity of LMS, supporting it as a valid index of cognitive vulnerability to anxiety using a variety of populations (clinical and non-clinical) and a variety of research designs (experimental and correlational) (Williams & Riskind, 2004). These studies have used a variety of methods to investigate the validity of the LMS model, including self-report assessments, computer-simulated movement of objects (e.g., moving spiders vs. moving rabbits), the presentation of videotaped scenarios (e.g., a campus mugging, possible contamination scenarios), and the presentation of moving and static visual images (Riskind et al., 2000). These studies have also investigated a range of cognitive-clinical phenomena (e.g., anxiety, coping styles, attachment styles) utilizing a wide range of stimuli (e.g., contamination, spiders, weight gain, rejection), as well as several sub-clinical populations (e.g., individuals with sub-clinical obsessive-compulsive disorder, social phobia, generalized anxiety disorder, posttraumatic stress disorder, panic disorder, depression, etc.) (Riskind et al., 2000). Several studies have used videotaped scenarios or computer generated stimuli to provide evidence that

phobic individuals employ the LMS model, exaggerating the extent to which their feared stimuli (e.g., spiders, snakes, or germs) are changing, advancing, or moving rapidly toward them.

On the basis of further experimental research on the LMS model, Riskind and colleagues have developed a self-report questionnaire, the Looming Maladaptive Style Questionnaire (LMSQ; Riskind, Kelley, Harman, & Gaines, 1992), to measure individuals' expectations with regard to dynamic progression of threatening situations (i.e., expectations that threat will actively accelerate and rapidly rise in risk).

Multiple studies have provided support for the convergent validity of the LMSQ, finding that higher scores on the LMSQ were associated with higher levels of anxiety as measured with previously validated anxiety questionnaires (Riskind et al., 2000). Finally, studies have provided considerable evidence for the specificity and discriminate validity of the LMSQ, finding that its scores differentiate between anxiety and depression (Riskind et al., 2000). Thus, the role of perceived looming danger in anxiety has received considerable support.

It stands to reason that partners in couple relationships also have the potential to employ the LMS model of processing before engaging in interactions with their partner. Based on preexisting cognitive schemas, partners may perceive the approach of threat or danger as rapidly advancing toward them when they engage with their partner in a discussion about a conflictual issue in their relationship leading to the subjective experience of state-level anxiety. Based on Riskind and Williams' (2004) LMS model and their theory of cognitive vulnerability to anxiety, it seems particularly plausible that partners who endorse a more insecure attachment style

would also anticipate negative experiences, such as aversive, rejecting, attacking, and controlling behaviors, when they interact with their partner.

Individual Attachment Style as a Cognitive Set in Close Relationships

Bowlby (1969, 1973) postulated that all individuals are born with innate needs for attachment to others, beginning with their dependency on adult caregivers. In Bowlby's attachment theory, children innately experience anxiety when they perceive that a caretaker is unavailable to meet their basic survival and attachment needs, and they develop working models as a result of interacting with caregivers from the time they are very young. A working model of attachment is an internal cognitive model of self and an internal model of others (essentially how available others are during times of need) each of which can be dichotomized as positive or negative to create four distinct theoretical attachment styles (Bowlby, 1973, 1980, 1982) (see attachment prototypes discussed previously). Based on childhood experiences, these working models of attachment, in turn, serve as cognitive templates that contribute to the individual's navigation within relationships throughout his or her lifespan (Bowlby, 1969, 1973). Bowlby (1969, 1973, 1980) theorized that early childhood experiences shaped two complementary but distinct working models of attachment between the self and others: (a) *a working model of self* that holds beliefs about one's own acceptability, lovability, and accessibility to an attachment figure; and (b) *a working model of others* that holds beliefs about a caregiver or attachment figure's accessibility, availability, and responsiveness to oneself during times of distress. These cognitive working models of self and other are thought to moderate the individual's proximity to an attachment figure or caregiver; for example, a person

who views the self as relatively unlovable and views an attachment figure as inconsistently available may exhibit clinging behavior in order to gain access to the other person (Bowlby, 1969, 1973). Though working models of attachment to self and other are thought to be relatively pliable during childhood, by the time an individual reaches adulthood, these working models are consolidated to remain relatively stable throughout adulthood, guiding interpersonal behavior and affecting self-concept, beliefs about self-efficacy, and regulation of emotions (Bowlby 1980, 1988; Hazan & Shaver, 1987; Rholes, Simpson, & Orina, 1999).

Using Bowlby's (1969, 1973) model of working attachment, Ainsworth and colleagues studied infant-mother dyads and used the "strange situation" research paradigm to identify a tripartite typology of infant attachment styles, including secure, anxious-resistant, and avoidant (Ainsworth, Blehar, Waters, & Wall, 1978). This study examined the quality of early attachment relationships as being tied to the degree the infant relies on the attachment figure as a source of security by examining infants' responses to separation from and reunion with caretakers in a structured laboratory setting (Ainsworth et al., 1978). As a result of this study, Ainsworth identified three distinct attachment styles based on the behavior: (1) infants classified as securely attached welcomed their caregiver when they returned after the separation period, and if distressed, readily allowed their caregiver to comfort them; (2) infants classified as anxious-resistant showed ambivalent behavior toward caregivers upon reunion and an inability to be comforted; (3) finally, infants classified as avoidant avoided proximity and interactions with the caretaker upon reunion (Ainsworth et al., 1978).

Hazan and Shaver (1987) have suggested that the same patterns identified by Ainsworth and colleagues in infant-mother dyads also manifest themselves in adolescence and early adulthood in adult romantic relationships. Similarly, Johnson, Makinen, and Millikin (2001) proposed that secure attachment bonds between partners in adult romantic relationships were pivotal in establishing satisfying relationships, suggesting that individuals commonly experience “attachment injuries,” characterized by a perception of abandonment or betrayal by a partner during a critical time of need. If not resolved, attachment injuries cause distress and a broad trait-like loss of perceived security in romantic relationships (Johnson et al., 2001). Individuals with such attachment injuries or insecure attachments are likely to respond with anxiety in relationships with significant others (Johnson et al., 2001).

Attachment style has been the focus of a number of research studies examining couples’ interaction patterns and provides an important framework for understanding vulnerability to anxiety in members of couples. Pistole and Arricale (2003) considered the interplay between the attachment styles, attachment related feelings about conflict, and conflict behavior, using self-report questionnaires in a non-clinical college student population, of which 85% were in a significant romantic relationship (the remaining 15% were asked to think about their most recent romantic relationship while filling out the survey). Individuals who described themselves as having a secure attachment on their self-report questionnaire were less likely than those endorsing preoccupied or fearful attachment to view arguing as threatening and were less concerned with closeness than those with preoccupied attachment (Pistole & Arricale, 2003). While those endorsing dismissing attachment styles reported more

fear and avoidance of arguments, securely attached individuals reported fewer arguments and more effective arguing (both in tactics used during the argument and in addressing important issues in the relationship) than individuals endorsing fearful attachment (Pistole & Arricale, 2003). Furthermore, Creasey (2002) examined attachment and conflict management in romantic couples and found that women who reported secure working models of attachment displayed more positive behaviors toward their partner during conflictual situations than did their insecurely attached counterparts. Men with insecure working models of attachment were more likely to express negative behaviors toward their partner during conflictual situations (Creasey, 2002). In addition, individuals who had unresolved or particularly insecure working models of attachment due to a loss or trauma were most vulnerable to displaying negative behavior, particularly controlling behavior toward their partner (Creasey, 2002).

In another study on attachment and dating relationships, Simpson, Rholes, and Nelligan (1992) examined how adult attachment moderated spontaneous patterns of behavior between partners placed in an anxiety-provoking situation. Women were chosen to be the ones told that they were going to be exposed to an anxiety-provoking activity while they waited with their male partner in a waiting room (Simpson et al., 1992). The results revealed that secure individuals and avoidant individuals differed to the extent that they were able to seek and provide support as a function of the woman's level of anxiety (Simpson et al., 1992). Specifically, more securely attached women were able to seek out more support from their partner as their anxiety increased, whereas avoidant women tended to seek less support when their anxiety

increased (Simpson et al., 1992). Similarly, more secure men were able to offer more support as their partners displayed greater anxiety, whereas more avoidant men offered less support as their partner's anxiety increased (Simpson et al., 1992). Using the same data set, Rholes, Simpson, and Orina (1999) examined the relationship between attachment style and anger in an anxiety-provoking situation and found that more avoidant men displayed more anger than secure men, especially if their partners were more anxious or distressed or sought more support from them. More avoidant women also displayed more anger than secure women, particularly if they were highly anxious or distressed, received little support from their partner, or encountered anger from their partner (Rholes et al., 1999). Additionally, ambivalently attached women behaved more negatively toward their partners, particularly if they were more anxious or distressed or sought more support from their partners (Rholes et al., 1999). A study by Collins and Feeney (2000) yielded similar results when dating couples were videotaped while one member of the couple (the support seeker) was to disclose a personal problem to their partner (the caregiver). Avoidant attachment predicted ineffective support seeking whereas anxious attachment was predictive of poor care giving (Collins & Feeney, 2000).

In summary, the type of attachment style that a person reports is associated with the ability to seek and give support within a couple relationship, cope with anxiety and distress, and moderate the amount of anger and negative behavior that are directed toward the partner. Prior research findings suggest that an individual's behavior can be predicted and understood in the context of the attachment style that he or she endorses. Furthermore, securely attached individuals report less avoidance

and fear in conflict situations (relevant to the focus of the present study), are more likely to perceive arguing as productive and less threatening than insecurely attached individuals, and report being less concerned with closeness to the other individual during an argument. Based on these research studies, the attachment style prototype that an individual endorses seems to have important implications for the amount of anxiety an individual will experience in a conflictual situation and how he or she will behave toward the partner. Consequently, attachment styles will be used as one of the predictors of anxiety during couple discussions in the present study.

Individuals' Appraisals and Attributions About the Spouse as Cognitive Factors in Anxiety within Relationships

Attributions, inferences that individuals make about factors that determine events that they observe, have been investigated as forms of cognition influencing the quality of couple relationships (Epstein & Baucom, 2002). Attribution theory was originated by Fritz Heider (see also 'The notebooks,' Vol. 5: Attributional and interpersonal evaluation, 1988), Edward Jones (see also Attribution theory, 1989; Attribution: Perceiving the causes of behavior, 2004), and Harold Kelley (The Processes of Causal Attribution, 1973), and endeavors to understand the process by which individuals create explanations for events. According to attribution theory, when an individual observes a behavior by the self or by another person, he or she makes inferences about the degrees to which the factors causing the act are (a) internal to the actor or external, (b) stable over time or unstable, and (c) global (affecting the actor's behavior across situations) or specific to particular circumstances (Kelley, 1973). Marital researchers have applied this model to understanding how partners' attributions about each other's behavior may influence

their relationship satisfaction and behavioral interactions (Bradbury & Fincham, 1990). Studies consistently have found that when individuals attribute a partner's negative behavior to global, stable characteristics of the partner, they are more distressed about the relationship, whereas global stable attributions for positive partner behavior are associated with greater relationship satisfaction (Bradbury & Fincham, 1990; Epstein & Baucom, 2002).

In addition to studying partners' attributions regarding the dimensions of the causal locus of behaviors, researchers have examined what Fincham (1985) referred to as "responsibility attributions." These involve inferences about aspects of the actor's motivation and intentions. Pretzer, Epstein, and Fleming (1991) developed their Marital Attitude Survey (MAS) to assess partners' dysfunctional attributions and expectancies within the couple relationship, and two of the subscales assess attributions about the partner's motives; namely, the degrees to which problems in the couple's relationship are due to one's partner's (a) lack of love, and (b) malicious intent. Pretzer et al. (1991) found that these attributions were correlated with relationship distress and negative communication toward the partner.

Although attributions about a partner's negative motives and intentions have been linked to global distress, they have not been investigated specifically in relation to anxiety that partners experience within their relationship. Given that the core cognitive aspect of anxiety is a perceived threat of danger, it seems reasonable to expect that individuals who attribute malicious intent and a lack of love to their partners would experience anxiety in anticipation of ways that the partners might behave negatively as a result of such negative motivation. Consequently, this

proposed study will examine negative attributions about partners' motives as possible predictors of individuals' state anxiety responses.

State level Anxiety in Couples' Relationships

Research studies on state-level anxiety typically have focused on perceptions of threat and apprehension that are aroused in interpersonal transactions, specifically with significant others (Lundgren et al., 1980). The intimate and generally long-term nature of marital relationships is likely to be critical in accounting for anxiety levels in both husbands and wives (Lundgren, et al., 1980, p. 227). In turn, state-level anxiety is presumed to have significant consequences for marital adjustment as well as each partner's psychological well-being (Lundgren, et al., 1980). Lundgren, et al. (1980) found that individuals' state anxiety was correlated with the degree to which they perceived that their spouse evaluated them negatively and the degree to which they evaluated themselves negatively. Additionally, for wives, lack of perceived solidarity with their spouse was the strongest predictor of anxiety, whereas for husbands negative self-evaluation was the strongest predictor of anxiety.

Dehle and Weiss (2002) examined the relationship between state anxiety and marital adjustment. They found that husbands' ratings of their current anxious mood predicted both spouses' marital satisfaction 12 weeks later, whereas wives' state-level anxiety was not predictive of either their own or their husband's subsequent marital satisfaction.

Emotion, Cognition, and Constructive and Destructive Behavior in Couples' Relationships

Increasing empirical evidence supports constructive or positive behaviors as contributing to higher levels of marital satisfaction in couples' relationships.

Specifically, when couples are asked to rate their marital satisfaction daily, higher ratings of marital satisfaction correspond with higher frequencies of positive behaviors and lower frequencies of destructive or negative behaviors (Christensen & Nies, 1980; Jacobson, Follette, & McDonald, 1982; Jacobson, Waldron, & Moore, 1980; Margolin, 1981; Wills, Weiss, & Patterson, 1974). Indeed, Gottman (1993) found that couples must achieve a five to one balance between positive and negative behavior in order to maintain satisfying relationships. In a review of positive behavior and communication in the couples' relationships within the relevant research literature, Osgarby (1998) found that:

Satisfied couples used more assent (Margolin & Wampold, 1981; Schaap, 1984), approval and caring (Birchler, Clopton, & Adams, 1984; Schaap, 1984), empathy (Birchler et al., 1984), humor, smiling, and laughing (Margolin & Wampold, 1981; Revenstorf, Hahlweg, Schindler, & Vogel, 1984); Schaap, 1984), positive physical touch (Margolin & Wampold, 1981; Revenstorf et al., 1984), and problem description and solutions (Birchler et al., 1984; Margolin & Wampold, 1981; Schaap, 1984). (p. 24)

Although findings are not consistent across studies and there is not an agreed upon typology of positive behaviors employed in committed relationships, there appear to be at least two categories of positive behavior that are correlated with marital adjustment (Epstein & Baucom, 2002). The first category is expressive behaviors or behaviors that “signify caring, concern, affection, and love” (Epstein & Baucom, 2002, p. 29). These can be holding hands, hugging, kissing, or other behaviors that make each partner feel valued and cared for (Epstein & Baucom, 2002). The second

category is instrumental behaviors or task-oriented behaviors that partners engage in as a means of nurturing and sustaining the relationship (Epstein & Baucom, 2002). These behaviors can include cooking, cleaning, and providing resources, such as money for the couple relationship (Epstein & Baucom, 2002). These behaviors often must be completed in order for the couple to sustain themselves, but the manner in which they are completed is important; when performing these behaviors it is ideal if the couple respects one another and works effectively together (Epstein & Baucom, 2002). Positive behavior can greatly enhance the sense of solidarity and marital satisfaction in couple relationships (Epstein & Baucom, 2002). It is also important to note that both expressive and instrumental behaviors can be directed at the relationship, one or both partners, or an arena in the external environment (Epstein & Baucom, 2002). Additionally, the propensity for positive behavior expressed by one partner to elicit positive behavior from the other partner is referred to as positive reciprocity (Epstein & Baucom, 2002). Conversely, there is also evidence to support the likelihood that negative behavior from one partner will also evoke negative behavior in the other partner, as is the case in negative reciprocity (Gottman, 1979).

Unlike positive behavior, destructive or negative behavior does not hold a distinction between expressive and instrumental behaviors (Epstein & Baucom, 2002). It seems that in the context of committed relationships, very few negative behaviors are experienced as being solely instrumental in nature (Epstein & Baucom, 2002). Typically, negative behaviors affect one's partner (and at times one's self) and the relationship, taking on significant meaning in the context of the relationship, and giving negative behavior expressive qualities (Epstein & Baucom, 2002). For

example, one partner may value a clean home, whereas the other partner, aware of their partner's proclivity, leaves socks lying around on the floor. The clean partner interprets their partner leaving clothing all over the house as a lack of respect for him/her. In this way, the instrumental behavior of leaving socks on the floor is interpreted as an expressive behavior in the form of lack of respect.

Like positive behaviors, negative behaviors are typically directed at one's self, one's partner, the relationship, or the larger environment (Epstein & Baucom, 2002). Negative behaviors include (but are not limited to): criticizing, blaming, hostility, withdrawing, putting down, and denying responsibility (Baucom & Epstein, 1990; Epstein & Baucom, 2002). Although negative reciprocity exists in both distressed and non-distressed couple relationships, it seems to occur more often in distressed couple relationships where cycles of negative reciprocity are more frequent and last for longer durations (Epstein & Baucom, 2002). Weiss and Heyman (1997) found that the frequency with which negative behaviors are performed in the relationship has an even greater impact on marital satisfaction than do positive behaviors. Therefore, addressing and minimizing negative behaviors in committed relationships is essential for marital satisfaction and adjustment.

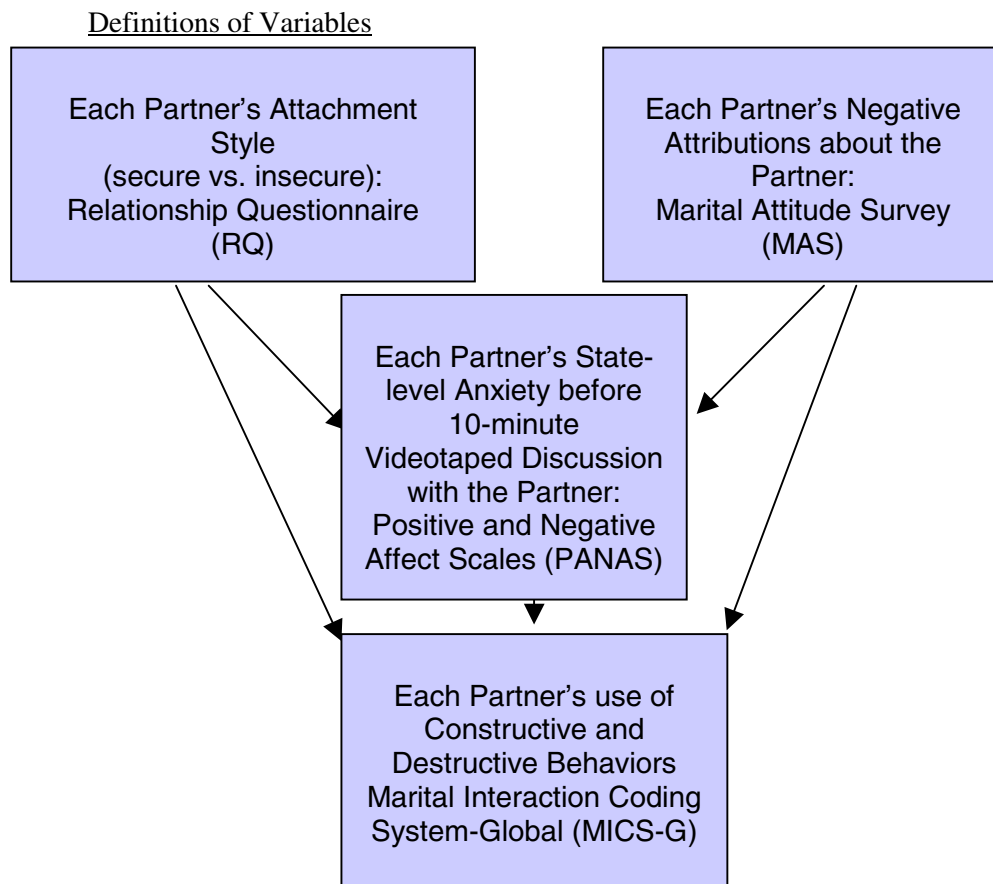


Figure 2 Model of Anxiety as a Mediator in the Relationship Between Attachment Style (secure versus insecure), Negative Attributions Made by Each Partner About the Partner's Intent, and the Use of Constructive and Destructive Behaviors During a Discussion About a Slightly to Moderately Conflictual Issue in the Relationship with Standardized Research Batteries Used to Measure Each Variable

Independent Variables

Attachment style. The predominant general type of attachment style that each partner in the relationship endorses as most descriptive of himself or herself in relationships with others, categorized as either secure or insecure (any of the avoidant, fearful, or dismissive styles).

Partners' negative attributions regarding the spouse's motivation toward them. The extent to which each partner attributes their partner's negative behavior in the relationship as being a manifestation of the partner's lack of love for them and the extent to which he or she attributed the negative partner behavior to malicious intent.

Mediating Variable

Each partner's experience of state-level anxiety. The extent to which each member of the couple reports subjective anxiety symptoms before they engage in a discussion with their partner. Note: State anxiety also will be examined as a variable mediating the relationship between attachment style and negative attributions and each partners' constructive and destructive communication behavior.

Dependent Variables

Constructive behaviors. The extent to which each partner employs positive behaviors during a ten-minute taped discussion about a slightly to moderately conflictual issue in the relationship. Constructive behaviors expressed by each partner are considered to be verbal and nonverbal manifestations of problem-solving, validation, and facilitation behavior.

Destructive behaviors. The extent to which each partner employs negative behaviors during a ten-minute taped discussion about a slightly to moderately conflictual issue in the relationship. Destructive behaviors expressed by each partner are considered to be verbal and nonverbal manifestations of conflict, invalidation, and withdrawal behavior.

Hypotheses

Based on the cited research, this study has 12 hypotheses and five research questions.

1. It is expected that individuals who report a more insecure attachment style will be more likely than individuals who report a secure attachment style to experience state anxiety before engaging in a discussion of a conflictual relationship issue with the partner.
2. It is expected that individuals who report an insecure attachment style will exhibit more destructive behaviors during a discussion of a conflictual relationship issue with the partner.
3. It is expected that individuals who report an insecure attachment style will exhibit less constructive behaviors during a discussion of a conflictual relationship issue with the partner.
4. It is expected that individuals who make negative attributions about their partner's motives (malicious intent and lack of love for them) will experience greater levels of state anxiety before engaging in a discussion of a conflictual relationship issue with the partner.
5. It is expected that individuals who make negative attributions about their partner's motives (malicious intent and lack of love for them) will exhibit more destructive behaviors during a discussion with their partner of a conflictual relationship issue.
6. It is expected that individuals who make negative attributions about their partner's motives (malicious intent and lack of love for them) will exhibit less constructive behaviors during a discussion with their partner of a conflictual relationship issue.

7. It is expected that individuals who experience more state anxiety before engaging in a discussion with their partner of a conflictual relationship issue will exhibit more destructive behaviors during the discussion.
8. It is expected that individuals who experience more state anxiety before engaging in a discussion with their partner of a conflictual relationship issue will exhibit less constructive behaviors during the discussion.
9. It is expected that state anxiety will mediate the relationship between individuals' attachment style (secure versus insecure) and their destructive behavior during the couple's discussion of a conflictual issue.
10. It is expected that state anxiety will mediate the relationship between individuals' attachment style (secure versus insecure) and their constructive behavior during the couple's discussion of a conflictual issue.
11. It is expected that state anxiety will mediate the relationship between individuals' negative attributions about their partner and their destructive behavior during the couple's discussion of a conflictual issue.
12. It is expected that state anxiety will mediate the relationship between individuals' negative attributions about their partner and their constructive behavior during the couple's discussion of a conflictual issue.

Research Questions

Research Questions

There is no clear theoretical or empirical basis for hypothesizing gender differences for the relationships among the variables in this study, but any such

differences that might be found would be of both theoretical and practical clinical interest. Consequently, the following research questions are posed:

1. Is there a difference between males' and females' levels of state-level anxiety before engaging in a discussion about a conflictual relationship issue with the partner?
2. Is there a difference between the relationship between male and female partners' attachment style and the level of state anxiety they experience before the couple's discussion of a conflictual relationship issue?
3. Is there a difference between males and females in the relationship between negative attributions about the partner and the level of state anxiety they experience before the couple's discussion of a conflictual relationship issue?
4. Is there a difference between males and females in the relationship between attachment style and use of constructive and destructive behaviors during the couple's discussion of a conflictual relationship issue?
5. Is there a difference between males and females in the relationship between negative attributions about the partner and use of constructive and destructive behaviors during the couple's discussion of a conflictual relationship issue?

Chapter 2: Method

Sample

The sample used in this study was comprised of 51 heterosexual couples that presented for couple therapy on their own accord at a university-based clinic and voluntarily opted to participate in an ongoing study focusing on treatment of abusive

behavior in couple relationships. The average age of males was 33 and the average age of females was 31. Of these couples, 56% were currently married and living together, 6% were currently married and not living together (separated), 19% were living together and not married, 15% were dating and not living together, and 4% were classified as other. The average length of relationship was 6-7 years. Of the couples' reported race, 52% of the participants were Caucasian, 33% were African American, 7% were Hispanic, 1% was Native American, and 7% classified themselves as other (see Figure 3).

Figure 3: Demographic Information for Couples Included in the Sample

Demographics by Group		
Variable	Males n=52	Females n=52
Mean age of partner	33.3	31.0
Mean length of relationship (in years)	6.8	7.1
Relationship Status		
Married, living together	29	29
Married, separated	3	3
Living together, not married	10	10
Dating, not living together	8	8
Other	2	2
Race		
Caucasian	28	26
African American	15	19
Hispanic	4	4
Native American	1	0
Other	4	3

The study used data previously collected for the larger study of couple treatments for psychological and physical abuse, conducted at a university-based

couple and family therapy clinic. The sample for the present study included all of the couples seeking therapy at the clinic who qualified for the Couples Abuse Prevention Program (CAPP) treatment study on the basis of meeting the following inclusion criteria: (1) both partners were 18 years or older; (2) both partners speak English fluently; (3) both partners reported being committed to the relationship; (4) both partners reported that mild to moderate levels of physical, verbal, and/or psychological abuse had taken place in the context of the relationship in the past four months; (5) both partners reported feeling safe being alone with the partner, living with their partner, and participating in couple therapy with partner; (6) both partners reported that there had not been an incident of violence in the last 4 months that had resulted in a need for medical treatment; and (7) both partners reported no untreated alcohol or drug abuse.

Exclusion criteria for the CAPP study included: severe physical violence resulting in medical treatment in the past four months, an untreated alcohol or substance abuse problem, at least one partner reporting that they were not committed to the relationship, either partner not speaking English fluently, and at least one partner reporting that he or she does not feel safe participating in therapy together with the partner, being alone with the partner, or living at home with the partner. Only data from those couples that were included in the larger study were used in the present study.

Instruments

Data for this study were extracted from questionnaires and behavioral assessment information collected during the original larger study of domestic abuse

treatment over the course of a two-day assessment period. This study began in 2001 and data continue to be collected. The following are descriptions of the instruments that were used to measure the variables examined in this study:

The Relationship Styles Questionnaire (RQ; Batholomew & Horowitz, 1991) (see Appendix A) was used to assess each partner's general attachment style (i.e., secure versus insecure). The RQ examines individual attachment styles using two underlying dimensions, the individual's working model of self (positive or negative) and the individual's working model of others (positive or negative) (see previous discussion on attachment prototypes), to identify four attachment prototypes (Batholomew & Horowitz, 1991). The RQ has two items: (1) descriptions of four attachment prototypes (i.e., secure, preoccupied, dismissing, and fearful), and each partner is asked to indicate which description best describes the way they interact in relationships with other people in general; and (2) each partner is asked to rate how much each of the four descriptions of attachment prototypes are like them on a Likert scale from 1=*not at all like me* to 4=*somewhat like me* to 7= *very much like me* (Batholomew & Horowitz, 1991). Rather than being categorized into one of the four attachment prototypes to create a dichotomous variable, for the purposes of this research study, each partner was assigned an attachment style (i.e., secure versus insecure) based on their responses to the RQ.

The Dyadic Adjustment Scale (DAS; Spanier, 1976) (see Appendix B) was used as a descriptive statistic to provide an assessment for each partner's level of relationship satisfaction at the time of intake. This 32-item instrument has four subscales: (1) dyadic satisfaction; (2) dyadic cohesion; (3) dyadic consensus; and (4)

affectional expression (Spanier, 1976). Given that this study examined a clinical sample, it was important to identify males' and females' Dyadic Adjustment Scale (DAS) scores to understand the level of relationship distress of the couples included in this sample at the time of the pre-therapy assessment; i.e., this was a sample attending a clinic, but how distressed were they?

The Relationship Issues Survey (RIS) (see Appendix C) was used to assess areas in each couple's relationship that were mild to moderate sources of disagreement. This 28-item measure includes topics such as finances, personal manners, privacy, and the couple's sexual relationship. Partners rate these items on a Likert scale from 0 = *Not at all a source of disagreement or conflict*, to 3 = *Very much a source of disagreement or conflict*. For the purposes of the communication sample, a topic in which both partners rate the item as a 1 or 2 (slightly or moderately a source of disagreement or conflict, respectively) is selected by the clinician as the topic for the 10-minute taped communication sample. Couples are instructed not attempt to resolve the topic, but to discuss the item as they would at home.

The Marital Interaction Coding System – Global (MICS G; Weiss & Tolman, 1990) (see Appendix D) was used assess each partners use of constructive and destructive behaviors during a 10-minute taped communication sample where both partners are asked to discuss an issue in their relationship that they have previously rated as a source of slight to moderate conflict. The MICS-G is a global behavioral coding system that examines both content and affective components of each partner's behavior during the taped communication sample. In order to categorize behaviors as constructive or destructive, the coding system focuses on multiple aspects of behavior

such as verbal cues, voice tone, body posture, word emphasis, and eye contact that are used to discern between six categories of constructive and destructive behavior.

Specifically, the MICS-G produces composite scores for each of the three types of constructive and destructive behavior. The constructive behavior categories are problem solving, validation, and facilitation:

- Problem solving
 - Content cues: problem description, proposing a positive and/or negative solution, and compromising with one's partner.
 - Affect cues: a relaxed and open body posture, a willingness to listen to one's partner, and attentiveness to one's partner.
- Validation
 - Content cues: expressing agreement with the partner's opinion or behavior, expressing approval of something the partner has said or done, and accepting responsibility for a past or present problem or behavior in the relationship.
 - Affect cues: expressions indicating agreement with one's partner (e.g., head nod, back-channeling responses, e.g., "Mm-hmm"), receptivity to one's partner (e.g., good eye contact), and encouragement of one's partner (e.g., warm voice tone, a display of patience that allows the partner to complete his/her statements).
- Facilitation
 - Content cues: positive mind-reading (i.e., statements that make positive inferences or assumptions about one's partner's),

paraphrasing (i.e., statements that mirror or reflect back what the partner said), and using humor (i.e., humorous and light-hearted statements that often evoke laughter from the partner).

- Affect cues: positive physical contact (e.g., hugging, kissing, and holding hands), friendly smiles and laughter, open body posture (e.g., a relaxed body, orienting one's head toward the other partner, and not using arms and feet to block one's body from the partner's body), and warm/affectionate tone of voice.

The three destructive behavior categories of the MICS-G are conflict, invalidation, and withdrawal:

- Conflict
 - Content cues: complaining (e.g., expressions of feeling deprived, wronged, or inconvenienced as a result of the partner's actions), criticizing (e.g., expressions of dislike or disapproval of a partner's behavior), negative mind-reading (e.g., statements inferring or assuming a negative attitude or emotion on the part of one's partner), put-downs and insults (e.g., statements intended to hurt, demean, or embarrass one's partner), and negative commands (e.g., angry or hostile demands made toward other partner).
 - Affect cues: hostility (e.g., obscene or threatening gestures; shouting), voice intonation that is sarcastic, whining, angry, and/or bitter.
- Invalidation

- Content cues: disagreement (e.g., statements of disagreement with the partner's opinion(s) or behavior), denial of personal responsibility (e.g., refuting any responsibility for a problem addressed by the other partner), changing the subject of the discussion (e.g., purposely steering the conversation away from the original problem), and excuses (e.g., illegitimate statements that attempt to avoid responding to the other partner or taking responsibility for one's behavior).
- Affect cues: interrupting one's partner (e.g., deliberate attempts to dominate the conversation), turn-off behaviors (e.g., expressions indicating displeasure, disgust, disapproval, or disagreement with the partner), inconsiderate or rude behaviors (e.g., gestures indicating that the listener is not interested in what their partner is saying), and domineering behaviors (e.g., behavior that attempts to control the other partner or discussion, refusing to allow the partner to speak, etc.).
- Withdrawal
 - Content cues: negation (e.g., statements indicating that the speaker does not want to take part in the conversation) and involuntarily contributing to the discussion (e.g., responding only when an answer is forced or demanded).
 - Affect cues: no response (e.g., silence after the other partner speaks), turning away (e.g., moving head and/or body away from

other partner while still in the same spatial position), increasing physical distance from one's partner (e.g., physically moving one's chair away from the partner), and erecting physical barriers (e.g., raising arms or hands between one's self and their partner as a means of forming a barrier or blockade).

For the larger study, each 10-minute communication sample was divided into five two-minute segments. In each segment, both partners are rated individually by two separate raters on a 6-point Likert scale for each of the six (three constructive and three destructive) behavior categories, in which 0 = *no use of behavior*, and 5 = *very high use of behavior*. To determine the appropriate score for each partner's use of constructive and destructive behaviors, the MICS-G coder manual instructs raters to watch a two-minute segment of the videotaped discussion, then make an overall rating of each partner's use of a particular behavior that comprises each category of constructive (e.g., facilitation) and destructive behavior. Each partner's score for each of the six behavioral categories was calculated as follows: for a given behavior category, (e.g., the use of facilitation behaviors) in a given two minute segment, the numbered ratings for each sub-behavior (1-5) are added together to create a total score that is representative of the amount of facilitation behavior that was employed during the two-minute taped segment. After the ratings for each category are added together separately for each partner, the total score for the facilitation behaviors each partner exhibited during each two-minute segment are divided by the number of categories of behavior. For example, the category facilitation is comprised of six categories: (1) positive mindreading (statements that make positive inferences or

assumptions about the thoughts of the partner), (2) paraphrase (a statement that mirrors or reflects something the partner just said), (3) humor (a statement intended to be and recognized as humorous and/or lighthearted by both partners), (4) positive physical touching (when one partner touches the other in a friendly or affectionate manner), (5) smiling or laughing, and (6) openness of body posture (i.e., a relaxed body with the head oriented toward the partner, without using the body to erect physical barriers). Therefore, the total score each partner receives for a given two-minute segment for the facilitation category is divided by six to create the category score. Each partner receives a category score for each of the six categories of constructive and destructive behavior during each two-minute videotaped segment. If the category score is a decimal, the category score is rounded to the closest whole number. After a coder has watched all five two-minute sections of the 10-minute communication sample and scored each of the three constructive and destructive behaviors separately, both raters meet together to compare their category scores for each of the three constructive and destructive behavior categories. In order to foster inter-rater reliability, raters must agree or be within one point of each other's category score when scoring each partner's use of constructive and destructive behaviors for each two-minute taped segment. Once both raters have reached agreement (i.e., their scores are within one point of one another), the scores from the three constructive behavior categories are summed to create a composite score for each of the six constructive and destructive behavior categories. Therefore, each partner participating in the study receives composite scores, representing each of the

constructive and destructive behaviors each partner employed during the 10-minute taped discussion with the partner.

The MICS-G, based on the Marital Interaction Coding System (MICS) created by Weiss and Summers (1983), was developed as a global behavioral measure to save researchers both time and money. The MICS is an event coding system in which each new behavior is coded by the raters (e.g., A partner that starts out talking about the children, but then switches to finances would receive two different speaker codes for each of the topics they engaged in during the partner's speaking role.), and then further analyzed into stimulus-response blocks, defined then as speaker-listener segments in which new behavior occurs (Weiss & Tolman, 1990). As a result of the attention to detail and time commitment required for the MICS coding, the MICS-G was developed as a global system, allowing raters to capture broader qualities of couples' interactions that might be missed when micro-level analysis is conducted, as in the MICS. The MICS-G coding system can be learned in as little as 10 hours, a minimal amount of clinical experience is required, and raters are able to code couple interactions with a high level of inter-rater reliability (Weiss & Tolman, 1990). Weiss and Tolman (1990) found that the MICS-G was superior to the MICS in the identification of partners' behavioral changes over the course of therapy as well as in identifying distressed versus non-distressed couples. Additionally, the MICS-G provided twice as many statistically significant correlations for marital adjustment as compared to the MICS. Finally, the MICS-G has been found to be highly reliable, and has demonstrated a high degree of discriminant (i.e., the ability to discriminate

distressed from non-distressed couples) and concurrent validity (Weiss & Tolman, 1990).

The Marital Attitude Survey (MAS; Pretzer et al., 1991) (see Appendix E) was used to assess partners' negative attributions about their partner's motives, specifically the partner's lack of love and the partner's malicious intent. The MAS is a self-report scale designed to measure each individuals' attributions and expectancies concerning problems in their couple relationship (Pretzer et al., 1991). The instrument contains 31 items and has eight subscales that measure attributions endorsed by each partner regarding the causality of relationship problems: (1) the problems in the relationship are caused by one's own behavior; (2) the problems in the relationship are caused by one's own personality; (3) the problems in the relationship are caused by the partner's behavior; (4) the problems in the relationship are caused by the partner's personality; (5) each individual's appraisal of their partner's malicious intent; and (6) each individual's appraisal of their partner's lack of love for them. There are two additional subscales that measure relationship expectancies: (7) each person's expectancy that the couple has the ability to improve their relationship; and (8) each person's expectancy that they actually will improve their relationship (Pretzer et al., 1991). In the present study, the subscales assessing attributions regarding the partner's lack of love (subscale number 6 above) and malicious intent (subscale number 5 above) were used. All items are answered on a 5-point Likert scale, ranging from 1=*Strongly agree* to 5= *Strongly disagree* (The items of these subscales appear in Appendix E.). In this study, each subject's scores on the two

MAS subscales was summed to form a composite score for negative attributions ranging from 15 to 75 with higher scores indicating more negative attributions.

The Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1998) (see Appendix F) was used to examine partners' individual reports of the emotions they experienced immediately before they engaged with their partner in the ten-minute taped discussion of a conflictual relationship issue. The PANAS is an internally consistent, largely uncorrelated, and empirically validated 22-item self-report questionnaire designed to assess positive and negative affect (Watson et al., 1998). Additionally, the scale's results have been shown to be stable over a two-month period from the time of administration (Watson et al., 1998). Positive affect reflects the degree to which an individual feels enthusiastic, active, and alert (Watson et al., 1998). Individuals high in positive affect state report high energy, full concentration, and pleasurable engagement whereas individuals who are low in positive affect are characterized by sadness and lethargy (Watson et al., 1998). Alternatively, negative affect is characterized by subjective distress and unpleasurable engagement that includes anger, contempt, disgust, guilt, fear, and nervousness (Watson et al., 1998). In contrast, individuals low in negative affect experience calm and serenity (Watson et al., 1998). Positive affect and negative affect traits correspond to the dominant personality characteristics of extraversion and anxiety/neuroticism (respectively) (Watson et al., 1998). Tellegen (1985) has suggested that low positive affect and high negative affect (both state and trait) are important distinguishing factors for depression and anxiety (respectively). Similar to subscales, the PANAS uses word triads that assess dimensions of positive and

negative affect; participants rate each word that describes a particular feeling or emotion in terms of how they are feeling at the particular moment using a 5-point Likert scale ranging from 1=*very slightly or not at all* to 5=*extremely* (Watson et al., 1998). For the purposes of the present study, the PANAS was examined for the items that indicate anxiety (nervous, jittery) and/or fear (scared, afraid) to assess the extent to which each partner experiences state-level anxiety before the 10-minute taped discussion about a conflictual issue with their partner.

Procedure

As previously noted, this study was taken from data collected for a larger study conducted at a university marriage and family therapy clinic. All couples participating in the research program presented on their own accord for couple therapy at the university-based clinic.

First day assessment. At the time of assessment, partners of each couple are placed in separate rooms to complete the assessment questionnaire packets, and their responses are kept confidential from their partner. The day 1 assessment packet is comprised of 11 standardized questionnaires designed to measure various facets of couple relationships, including each partner's reported level of depression, conflictual issues in the relationship, degree of commitment to the relationship, satisfaction with the relationship, general attachment style, self-reported conflict styles and behaviors, level of social support, roles in the relationship, and trauma symptoms. Each member of the couple is given a structured interview to assess both partners' use of drugs and alcohol, anger management, past history of physical violence in the relationship, and

each partners' sense of safety when alone with their partner, living with their partner, and participating in couple therapy together with their partner.

Second day assessment. If the couple qualifies for inclusion in criteria for the CAPP study and agrees to participate, they are asked to complete an additional day of assessment that examines additional aspects of their relationship and couple functioning as well as a 10-minute videotaped communication sample in which the couple is asked to discuss an issue that they have both identified on their Relationship Issues Survey as being a source of slight to moderate conflict (i.e., Both members rated the discussion item as a 1=slight source of conflict or a 2=moderate source of conflict) (see Appendix C). After the couple's discussion is videotaped (with the couple's permission), it is subsequently coded by two independent raters using the MICS-G.

All of the above procedures were conducted in the original study. In the present study, the investigator used data from the existing database. The procedure involved identifying all of the couples in the database that completed the full set of measures needed for this study and conducting the analyses to test the hypotheses and address the research questions.

Construction of Attachment Index

In order to create a variable to represent each participant's attachment style (secure versus insecure), partners' responses to the forced-choice section of the RQ were examined. Partners who reported that statement A (see Appendix A) was most like them were deemed to be securely attached, whereas partners who reported that

item B, C, or D was most like them were all rated as insecurely attached. This procedure resulted in a dichotomous variable: secure versus insecure attachment.

Construction of Behavioral Indices of Couple Communication

Due to the limited statistical power available for computing multiple statistical tests as a result of the relatively small sample size ($n = 52$ couples), the six categories of coded behavioral communication derived from the MICS-G (see Appendix D) were collapsed into two composite variables: constructive communication behavior (the sum of each subject's problem solving, validation, and facilitation behaviors) and destructive behavior (the sum of the subject's conflict, invalidation, and withdrawal behaviors).

Construction of State-Level Anxiety Index

Using the PANAS (see Appendix F) the state-level anxiety variable was constructed using a portion of the scale's negative affect subscale. Individuals had been instructed to rate each item on the scale based on how they were feeling toward the partner at that very moment (just before they were to engage in the 10-minute taped discussion about a relationship issue that was slightly to moderately a source or disagreement in the relationship, as identified by the RIS (see Appendix C). For the purposes of this study, the researcher used each partner's ratings for four items that best exemplified anxious emotions: scared, nervous, jittery, and afraid. Watson, Clark, and Tellegen (1988) referred to the items "scared" and "afraid" as being included in a fearful subscale and the items "nervous" and "jittery" as being included in a jittery subscale, so the present use of these four items as aspects of anxiety seems consistent with Watson et al.'s categorization of them. Participant responses to each

of these four subscale items range from *1 = feeling the emotion very slightly or not at all* to *5 = feeling the emotion at an extreme level*. Therefore, the total score for these four items could range from 4 to 20. As a dependent variable, scores on this anxiety index were used as a continuous variable, ranging from lower to higher anxiety. There was no established cutoff score for differentiating “low” from “high” anxiety; rather, the purpose of this study was to examine relative levels of anxiety. When state anxiety was used as an independent variable predicting levels of constructive and destructive behavior, it also was used as a continuous variable.

Chapter 3: Results

Construction of Negative Attribution Index

Participants' total scores on the MAS subscales assessing negative attributions made about the partner's lack of love and his or her malicious intent (see Appendix E) were summed to create one variable representing negative attributions made about the partner. Then, the distribution of scores on this negative attribution total was examined separately for females and for males (see Tables 1 and 2, respectively), to determine the median split for each group. For females, the median split point for negative attributions was 44, meaning that females who had a score below or equal to 44 were considered to have lower negative attributions about their partner whereas females with negative attribution scale scores equal to 45 or higher were considered to have a higher level of negative attributions about their partner's lack of love for

them and malicious intent. When the median split was performed for the males, the split occurred just above that for the females, such that males with a score equal to or below 46 were considered to have lower negative attributions about their partner whereas males with scores equal to or above 47 were considered to have higher negative attributions about their partner. Thus, this study examined relatively higher versus lower negative attributions, because there are no known norms for establishing “high” and “low” levels of negative attributions.

Table 1: Distribution of MAS Negative Attribution Total Scores Used for Females’ Median Split

MAS Total Score	Frequency	Percent	Valid Percent	Cumulative Percent
30.00	1	2.0	2.4	2.4
35.00	1	2.0	2.4	4.8
36.00	1	2.0	2.4	7.1
39.00	2	3.9	4.8	11.9
40.00	2	3.9	4.8	16.7
41.00	1	2.0	2.4	19.0
42.00	3	5.9	7.1	26.2
43.00	5	9.8	11.9	38.1
44.00	5	9.8	11.9	50.0
45.00	4	7.8	9.5	59.5
46.00	2	3.9	4.8	64.3
47.00	3	5.9	7.1	71.4
48.00	1	2.0	2.4	73.8
50.00	3	5.9	7.1	81.0
51.00	1	2.0	2.4	83.3
53.00	1	2.0	2.4	85.7
55.00	1	2.0	2.4	88.1
56.00	1	2.0	2.4	90.5
57.00	1	2.0	2.4	92.9
58.00	1	2.0	2.4	95.2
61.00	1	2.0	2.4	97.6
71.00	1	2.0	2.4	100.0
Total	42	82.4	100.0	
Missing System	9	17.6		
Total	51	100.0		

Table 2: Distribution of MAS Negative Attribution Total Scores Used for Males' Median Split

MAS Total Score	Frequency	Percent	Valid Percent	Cumulative Percent
38.00	2	3.9	4.8	4.8
39.00	3	5.9	7.1	11.9
40.00	1	2.0	2.4	14.3
42.00	1	2.0	2.4	16.7
43.00	3	5.9	7.1	23.8
44.00	5	9.8	11.9	35.7
45.00	2	3.9	4.8	40.5
46.00	4	7.8	9.5	50.0
47.00	8	15.7	19.0	69.0
48.00	2	3.9	4.8	73.8
50.00	1	2.0	2.4	76.2
51.00	3	5.9	7.1	83.3
53.00	1	2.0	2.4	85.7
55.00	1	2.0	2.4	88.1
58.00	1	2.0	2.4	90.5
61.00	1	2.0	2.4	92.9
72.00	1	2.0	2.4	95.2
74.00	1	2.0	2.4	97.6
75.00	1	2.0	2.4	100.0
Total	42	82.4	100.0	
Missing System	9	17.6		
Total	51	100.0		

Descriptive Statistics

Marital status was examined for the 52 couples in the sample. Given that this study was based on a clinical sample, it is important to identify the mean Dyadic Adjustment Scale (DAS) scores for the males and females to understand the extent of relationship distress that the members of the couples included in this sample were experiencing at the time of their pre-therapy assessment. According to Spanier (1976), partners with DAS scores below 100 are considered to have a particularly low level of dyadic satisfaction. Partners' self-reports of marital satisfaction were

examined solely for such descriptive purposes. The mean DAS score for females included in this study was 82.88, with a standard deviation of 23.03, and the mean for the males was 90.43, with a standard deviation of 22.11.

Tests of the Hypotheses

The following are descriptions of the analyses used to test the study's hypotheses. The statistical methods employed in this study were analyses of variance (ANOVA), analyses of covariance (ANCOVA), and Pearson correlations. Female and male partners' scores on each variable cannot be assumed to be theoretically or statistically independent; as a result, each of the analyses described below was computed twice, once for females and once for males.

Hypotheses 1 and 4 used a 2 X 2 ANOVA, with the independent variables of attachment style (secure vs. insecure) and negative attributions (higher vs. lower), and the dependent variable of state anxiety. Hypothesis 1 was tested with the main effect of attachment style, to examine if individuals who reported an insecure attachment style experienced higher levels of state anxiety before engaging in a discussion with their partner about a conflictual relationship issue than did individuals who reported a secure attachment style. This hypothesis was not supported for females, as the main effect for attachment style was not significant. However, this hypothesis was supported for males, in that there was a significant main effect for attachment style on state anxiety; $F(1, 36) = 6.074, p = .019$ (see Table 3). The mean state anxiety for the participants with insecure attachment styles was 7.26, whereas the mean for those with secure attachment styles was 5.06. As denoted by the degrees of freedom, data from less than the study's total sample of 52 male partners were available for testing

this hypothesis. The lower number for this particular test indicates that there were some missing data on the variables used.

Table 3: Analysis of Variance for Males' State Anxiety as a Function of Attachment Style and Negative Attributions

Source	Sum of Squares	Df	Mean Square	F	Sig.
Attstyle	47.884	1	47.884	6.074	.019
Mngatmed	6.990	1	6.990	.887	.353
attstyle * mngatmed	.518	1	.518	.066	.799
Error	283.827	36	7.884		
Total	1887.000	40			

Note: Attstyle = attachment style; mngatmed = male's negative attributions with median split

For hypothesis 4, the same 2 X 2 ANOVA was also used, examining the main effect for negative attributions on state anxiety, to test whether or not individuals who made more negative attributions about their partner's motives (malicious intent and lack of love for them) experienced greater levels of state anxiety before engaging in a discussion with their partner about a conflictual relationship issue. Hypothesis 4 was not supported for females or males.

For both hypotheses 2 and 5, a second ANOVA was computed, with the independent variables of attachment style (secure vs. insecure) and negative attributions (higher vs. lower), and the dependent variable of destructive behavior as coded from the 10-minute communication sample. Hypothesis 2 was tested using the main effect for attachment style to determine whether or not individuals who reported an insecure attachment style exhibit more destructive behavior during the couple

discussion than do individuals who reported a secure attachment style. This hypothesis was not supported for females or males.

Hypothesis 5 was tested in terms of the main effect for negative attributions, to determine whether or not individuals who made more negative attributions about the partner's motives (malicious intent and lack of love for them) exhibited more destructive behavior during the couple discussion than did those who made less negative attributions. This hypothesis was not supported for females or males.

A third ANOVA was run with the independent variables of attachment style (secure vs. insecure) and negative attributions (higher vs. lower), and the dependent variable of constructive behavior. Hypothesis 3 was tested with the main effect for attachment style, to determine whether or not individuals who reported an insecure attachment style exhibited less constructive behaviors during a discussion with their partner of a conflictual relationship issue than did those who reported a secure attachment style. This hypothesis was supported for females; $F(1, 46) = 4.037$; $p = .05$, in the predicted direction (see Table 4). The mean constructive behavior for the participants with insecure attachment styles was 2.82, whereas the mean for those with secure attachment styles was 3.35. This hypothesis was not supported for males.

Table 4: Females' Constructive Behavior as a Function of Negative Attributions and Attachment Style

Source	Sum of Squares	Df	Mean Square	F	Sig.
Attstyle	3.902	1	3.902	4.037	.050
Fngatmed	.102	1	.102	.106	.747
Attstyle * fngatmed	2.903	1	2.903	3.004	.090
Error	44.461	46	.967		
Total	501.130	50			

Note: Attstyle=attachment style; fngatmed=female negative attributions with a median split

Hypothesis 6 was tested as the main effect for attributions in the above ANOVA, to determine whether or not individuals who made more negative attributions about the partner's motives (malicious intent and lack of love for them) exhibited less constructive behaviors during a discussion with the partner about a conflictual relationship issue than did those who made less negative attributions. This hypothesis was not supported for females, but there was a trend for an interaction between females' attachment style and negative attributions; $F(1, 46) = 3.004, p = .09$ (see Table 4). The females' cell means for this interaction effect scores are examined for an interaction between attachment style and attributions (see Tables 5 and 6). This hypothesis was not supported for males.

Table 5: Cell Means for Constructive Behavior for Females' Negative Attributions and Attachment Style

attachment style	female negative attribution median split	Mean	Std. Deviation	N
Secure Attachment	1.00	3.7500	1.00946	6
	2.00	3.1273	1.29699	11
	Total	3.3471	1.20992	17
Insecure Attachment	1.00	2.6176	.89738	17
	2.00	3.0437	.80247	16
	Total	2.8242	.86676	33
Total	1.00	2.9130	1.03717	23
	2.00	3.0778	1.01008	27
	Total	3.0020	1.01549	50

Table 6: Females' Mean Scores for Dependent Variable Constructive Behavior for Females' Negative Attributions and Attachment Style

	Insecure Attachment	Secure Attachment
Low Negative Attributions	2.62	3.75
High Negative Attributions	3.04	3.13

Hypothesis 7 was tested using a Pearson correlation between the two variables, state anxiety and destructive behavior to determine whether or not individuals who experienced more state anxiety before engaging in a discussion with their partner about a conflictual relationship issue exhibited more destructive behaviors during the discussion. This hypothesis was supported for females, as the

correlation between state anxiety and destructive behavior was .273 ($p = .024$, 1-tailed) (see Table 7). However, this hypothesis was not supported for males in that the correlation was not significant (see Table 8). Additionally, it is important to note (see Tables 7 and 8) that the variables for constructive and destructive behavior are moderately and significantly negatively correlated with one another for both females and males. For females, the correlation coefficient was $-.369$ ($p = .003$, 1-tailed), and for males, it was $-.434$ ($p = .001$, 1-tailed).

Table 7: Pearson Correlations for Females' State Anxiety and Communication Behavior

		Panasanx	Destbeh	Consbeh
Panasanx	Pearson Correlation	1	.273(*)	-.236(*)
	Sig. (1-tailed)	.	.024	.044
	N		53	53
Destbeh	Pearson Correlation	.273(*)	1	-.369(**)
	Sig. (1-tailed)	.024	.	.003
	N	53	54	54
Consbeh	Pearson Correlation	-.236(*)	-.369(**)	1
	Sig. (1-tailed)	.044	.003	.
	N	53	54	54

* $p < .05$ level (1-tailed).

** $p < .01$ level (1-tailed).

Note: panasanx = state anxiety; destbeh = destructive behavior; constbeh = constructive behavior.

Table 8: Pearson Correlations for Males' State Anxiety and Communication Behavior

		Panasanx	Destbeh	Consbeh
Panasanx	Pearson Correlation	1	-.117	.134
	Sig. (1-tailed)	.	.203	.169
	N		53	53
Destbeh	Pearson Correlation	-.117	1	-.434(**)
	Sig. (1-tailed)	.203	.	.001
	N	53	54	54
Consbeh	Pearson Correlation	.134	-.434(**)	1
	Sig. (1-tailed)	.169	.001	.
	N	53	54	54

** p < .01 (1-tailed).

Note: panasax = state anxiety; destbeh = destructive behavior; constbeh = constructive behavior.

Hypothesis 8 was tested with a Pearson correlation between the two variables of state anxiety and constructive behavior to determine whether or not individuals who experienced more state anxiety before engaging in a discussion with the partner about a conflictual relationship issue exhibited less constructive behaviors during the discussion. This hypothesis was supported for females in that the correlation was $-.236$; $p = .044$, 1-tailed (see Table 7). However, this hypothesis was not supported for males (see Table 8).

For hypotheses 9 and 11 an analysis of covariance (ANCOVA) was run with the independent variables of attachment style (secure vs. insecure) and negative attributions (higher vs. lower), the dependent variable of destructive behavior, and the covariate of state anxiety. Hypothesis 9 was tested in terms of whether or not entering the covariate of state anxiety reduced the main effect of attachment style on destructive behavior, to determine whether or not state anxiety mediated the relationship between individuals' attachment style security and their destructive

behavior during the couple's discussion about a conflictual issue. The mediation hypothesis was not supported for females or males.

Hypothesis 11 was tested in terms of whether or not entering the covariate of state anxiety reduced the main effect of negative attributions on destructive behavior, to determine whether or not state anxiety mediated the relationship between individuals' negative attributions about the partner and their destructive behavior during the couple's discussion about a conflictual issue. Again, this hypothesis was not supported for females or males.

Finally, an ANCOVA was run for hypotheses 10 and 12 with the independent variables of attachment style (secure vs. insecure) and negative attributions (higher vs. lower), the dependent variable of constructive behavior, and the covariate of state anxiety. Hypothesis 10 was tested in terms of whether or not entering the covariate of state anxiety reduced the main effect of attachment style on constructive behavior, to determine whether or not state anxiety mediated the relationship between individuals' attachment style security and their constructive behavior during the couple's discussion about a conflictual issue. This hypothesis was supported for females based on the fact that addition of state anxiety as a covariate in examining the relationship between attachment security and constructive behavior reduced the p -value from a statistically significant $p = .05$ to a non-significant $p = .068$ (see Table 9). In contrast, this hypothesis was not supported for the males.

Table 9: ANCOVA for Females' State Anxiety as Mediating the Relationship Between Attachment Style and Constructive Behavior

Source	Sum of Squares	df	Mean Square	F	Sig.
Panasanx	3.248	1	3.248	3.546	.066
Attstyle	3.202	1	3.202	3.496	.068
Fngatmed	.266	1	.266	.290	.593
Attstyle * fngatmed	4.423	1	4.423	4.829	.033
Error	41.213	45	.916		
Total	501.130	50			

Note: panasax = state anxiety; attstyle = attachment style; fngatmed = female negative attributions with a median split

Hypothesis 12, that state anxiety would mediate the relationship between individuals' negative attributions about the partner and their constructive behavior during the couple's discussion about a conflictual issue, was tested in terms of whether or not entering the covariate of state anxiety reduces the main effect of negative attributions on constructive behavior in the ANCOVA. This hypothesis was supported for females. The trend toward an interaction effect between females' negative attributions and attachment style found for females in the test of hypothesis 6 ($p = .09$) increased to a significant level ($p=.033$) when the covariate of state anxiety was added (see Table 9). This mediation hypothesis was not supported for males.

Analyses for research questions

The following analyses were run in an exploratory way to address the following research questions:

For Research Question 1, because female and male partners' scores cannot be assumed to be statistically independent, a *t*-test for paired groups was used to determine whether or not there is a difference between males' and females' levels of

state-level anxiety before engaging in a discussion with their partner of a conflictual relationship issue. No sex difference was found.

For Research Question 2, a 2 X 2 ANOVA was run, with gender and attachment style (secure vs. insecure) as the independent variables, and state anxiety as the dependent variable, to determine whether or not there was a difference between males' and females' relationship between attachment style and the level of state anxiety before the couple's discussion about a conflictual relationship issue. No sex difference was found.

For Research Question 3, a 2 X 2 ANOVA was run, with gender and level of negative attributions (higher vs. lower) as the independent variables, and state anxiety as the dependent variable, to determine whether or not there was a difference between males and females in the relationship between negative attributions about the partner and the level of state anxiety before the couple's discussion about a conflictual relationship issue. No sex difference was found.

For Research Question 4, two ANOVAs were run, each with gender and attachment style as the independent variables, to determine whether or not there was a difference between males and females in the relationship between attachment style and use of constructive and destructive behaviors during the couple's discussion about a conflictual relationship issue. In one analysis the dependent variable was destructive behavior, and in the other, it was constructive behavior. No sex difference was found for either type of communication behavior.

For Research Question 5, two ANOVAs were run, each with gender and level of negative attributions as the independent variables, to determine whether or not there

was a difference between males and females in the relationship between negative attributions about the partner and use of constructive and destructive behaviors during the couple's discussion about a conflictual relationship issue. In one analysis the dependent variable was destructive behavior, and in the other it was constructive behavior. No sex difference was found.

Chapter 4: Discussion

Summary of Overall Findings

The study resulted in the following findings (see Table 10).

Table 10: Summary of Overall Findings

Hypothesis	Measure(s)	Result
1. Individuals who report a more insecure attachment style will be more likely than individuals who report a secure attachment style to experience state anxiety before engaging in a discussion of a conflictual relationship issue with the partner.	RQ PANAS	Supported for males only.
2. Individuals who report an insecure attachment style will exhibit more destructive behaviors during a discussion of a conflictual relationship issue with the partner.	RQ MICS-G	Not supported for females or males.
3. Individuals who report an insecure attachment style will exhibit less constructive behaviors during a discussion of a conflictual relationship issue with the partner.	RQ MICS-G	Supported for females only.
4. Individuals who make negative	MAS	Not supported for females

<p>attributions about their partner's motives (malicious intent and lack of love for them) will experience greater levels of state anxiety before engaging in a discussion of a conflictual relationship issue with the partner.</p>	<p>PANAS</p>	<p>or males.</p>
<p>5. Individuals who make negative attributions about their partner's motives (malicious intent and lack of love for them) will exhibit more destructive behaviors during a discussion with their partner of a conflictual relationship issue.</p>	<p>MAS MICS-G</p>	<p>Not supported for females or males.</p>
<p>6. Individuals who make negative attributions about their partner's motives (malicious intent and lack of love for them) will exhibit less constructive behaviors during a discussion with their partner of a conflictual relationship issue.</p>	<p>MAS MICS-G</p>	<p>There was a non-significant ($p = .09$) trend for an interaction effect for females only.</p>
<p>7. Individuals who experience more state anxiety before engaging in a discussion with their partner of a conflictual relationship issue will exhibit more destructive behaviors during the discussion.</p>	<p>PANAS MICS-G</p>	<p>Supported for females only.</p>

<p>8. Individuals who experience more state anxiety before engaging in a discussion with their partner of a conflictual relationship issue will exhibit less constructive behaviors during the discussion.</p>	<p>PANAS MICS-G</p>	<p>Supported for females only.</p>
<p>9. State anxiety will mediate the relationship between individuals' attachment style (secure versus insecure) and their destructive behavior during the couple's discussion of a conflictual issue.</p>	<p>PANAS RQ MICS-G</p>	<p>Not supported for females or males.</p>
<p>10. State anxiety will mediate the relationship between individuals' attachment style (secure versus insecure) and their constructive behavior during the couple's discussion of a conflictual issue.</p>	<p>PANAS RQ MICS-G</p>	<p>Supported for females only.</p>
<p>11. State anxiety will mediate the relationship between individuals' negative attributions about their partner and their destructive behavior during the couple's discussion of a conflictual issue.</p>	<p>PANAS MAS MICS-G</p>	<p>Not supported for females or males.</p>
<p>12. State anxiety will mediate the relationship between individuals' negative attributions about their partner and their</p>	<p>PANAS MAS MICS-G</p>	<p>Supported for females only.</p>

constructive behavior during the couple's discussion of a conflictual issue.		
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The first hypothesis was supported, such that insecurely attached men were more likely than securely attached men to experience higher levels of state anxiety before engaging in a slightly to moderately conflictual discussion with the partner.

The second hypothesis, individuals who report a more insecure attachment style will be more likely than individuals who report a more secure attachment style to exhibit more destructive behavior was not supported for females or males.

Consistent with the third hypothesis, it was found that females who reported an insecure attachment style exhibited less constructive behaviors during the conflictual discussion with the partner.

The fourth hypothesis, individuals who make more negative attributions about the partner's motives (i.e., malicious intent and lack of love for them) will experience higher levels of state-anxiety before engaging in a discussion with the partner about a conflictual relationship issue was not supported for females or males.

The fifth hypothesis, individuals who make more negative attributions about their partner's motives (i.e., malicious intent and lack of love for them) will exhibit more destructive behavior was not supported for females or males.

For hypothesis six, there was a non-significant ($p = .09$) trend for an interaction effect for females between attachment security and negative attributions, for the dependent variable of constructive behaviors during the conflictual discussion with the partner. Examining the means for constructive communication (see Table 6),

the trend toward a significant relationship becomes more apparent. The highest mean (3.75) for constructive behavior exists for females who are securely attached and make lower negative attributions about the partner. This finding is intuitive in the sense that females who report a secure attachment and make lower negative attributions about the partner would be most likely to exhibit more constructive behaviors with the partner, because they are not experiencing threat or danger in the form of insecure attachment (a negative appraisal of self and/or other) or perceived negative attributions about the partner. The next highest mean (3.13) for constructive behavior occurs when females are securely attached and make higher negative attributions about the partner's intent for them. This suggests that higher negative attributions made about the partner lowers the level of constructive behaviors exhibited even when the female is securely attached. The third highest mean (3.04) occurs when females report being insecurely attached and make higher negative attributions about the partner. This mean (3.04) is not much lower than the constructive behavior mean for females who are securely attached and make higher negative attributions (3.13), suggesting that when females make higher negative attributions about the partner, their attachment security does not have much of an effect on the amount of constructive behaviors they exhibit (i.e., the impact of the negative attributions is greater than attachment style). The lowest mean for constructive behavior (2.62) occurs when females report an insecure attachment and lower negative attributions. This finding is interesting because intuitively, it seems as though females who report insecure attachment and a higher level of negative

attributions about the partner would have the lowest mean score for constructive behavior.

One hypothesis as to why females who report insecure attachment and higher negative attributions have a higher mean score for constructive behavior (3.04) is that these women, perceiving the partner as having negative motives, may be trying to constructively engage the partner in some way, to reduce the possibility that the partner will reject them. Additionally, the present research only examines secure versus insecure attachment; however, Bartholomew and Horowitz (1991) have proposed three types of insecure attachment. Perhaps insecurely attached females who have positive views of themselves, but hold a negative appraisal of the partner, as in dismissing attachment, are the group that are reporting insecure attachment, and higher negative attributions about the partner. This possible scenario is consistent with Bartholomew and Horowitz's (1991) categorization of types of insecure attachment. In this way, females who have positive appraisals of self in romantic relationships may behave more constructively toward the partner, even when these females view the partner negatively. Given that females who report a dismissing attachment style view themselves positively, perhaps they also perceive themselves as effective in engaging the partner, contributing to more constructive behavior even when higher negative attributions are made about the partner. Similarly, females in the group that exhibits the lowest number of constructive behaviors (mean = 2.62), reporting insecure attachment and lower negative attributions about the partner may be categorized by Bartholomew & Horowitz (1991) as having preoccupied attachment, viewing themselves negatively, but the partner positively (this is

consistent with the females in this group making lower negative attributions about the partner). If the females in this group are predominantly characterized by preoccupied attachment, these females may have more of an internalized cognitive schema that they are unlovable, believing that no matter what behavior they exhibit (constructive or destructive), they will not be seen as desirable and lovable to their partner.

Because the sample used for the present study was not large enough to examine multiple categories of insecure attachment separately, this is a consideration for future research studies. Consistent with the seventh hypothesis, a statistically significant correlation for females was found, such that females who experienced more state anxiety before engaging in a conflictual discussion with the partner exhibited more destructive behaviors during the discussion. Therefore, females' state anxiety before the couple discussion predicted the use of destructive behavior, whereas for males it did not.

Consistent with the eighth hypothesis, a statistically significant correlation was found for females, in which females who experienced more state anxiety before engaging in a conflictual discussion with the partner exhibited less constructive behaviors during the discussion. Thus, for females', state anxiety before the couple discussion predicted their use of constructive communication, whereas for males it did not.

The ninth hypothesis, that state anxiety will mediate the relationship between individuals' attachment security and their use of destructive behavior during the couple's discussion of a conflictual issues issue, was not supported for females or males.

Consistent with hypothesis ten, there is evidence that for females, state anxiety acted as a mediating variable between individuals' attachment security and the use of constructive behavior during a discussion about a conflictual relationship issue with the partner. Though there had been a significant relationship between insecure attachment styles and the use of less constructive behavior for females, when state anxiety was added as the mediating variable, the significance of this relationship was reduced, supporting the role of state anxiety as a mediator between attachment security and the use of constructive behavior.

For hypothesis eleven, the level of state anxiety will mediate the relationship between individuals' negative attributions about the partner and their destructive behavior during that couple's discussion about a conflictual issue was not supported for females or males.

Consistent with hypothesis twelve, there was evidence that for females, state anxiety acted as a mediating variable between individuals' negative attributions about their partners' motives, attachment style, and their use of constructive behaviors during a conflictual discussion with the partner. These results were particularly noteworthy given that there had been a *trend* toward interaction between females' negative attributions and attachment style in determining the amount of constructive communication, but it was not until the covariate of state anxiety was added that constructive behavior was predicted significantly. This finding is consistent with prior theory and research indicating that anxiety can play a motivating role in individuals' behavior.

Although no gender differences were found in the tests of the exploratory research questions, there was some indication that gender may play a role in the relations among attachment styles, attributions, anxiety, and couple communication, given that there were more statistically significant findings for females than for males. For males, the only statistically significant finding was that those who reported being insecurely attached experienced higher levels of state anxiety before the conflictual discussion with their partner than did those who reported being securely attached.

Understanding the Results within the Context of Previous Research

The first finding, that insecurely attached males were more likely to experience state anxiety before the interaction with the partner was consistent with Pistole and Arricale's (2003) research finding that individuals endorsing insecure attachment were more likely to interpret arguments with their partner as threatening, and were more susceptible to experiencing greater levels of state-anxiety in conjunction with discussions and arguments with the partner.

The second finding, females who report more insecure attachment exhibit less constructive behaviors during a discussion or interaction with the partner is consistent with Creasey's (2002) research finding that women who reported secure working models of attachment displayed more positive behaviors toward their partner during conflictual situations than did their insecurely attached counterparts. Additionally, this finding is also consistent with Rholes and colleagues (1999) research suggesting insecurely attached women behaved more negatively toward their partners during a taped interaction.

The third and fourth findings, females that experience higher levels of state anxiety exhibit more destructive and less constructive behavior during a conflictual discussion has not been examined by previous research. These findings fill an important gap in previous couples research, in that this research study has found that females do exhibit less constructive behavior (specifically problem solving, validation, and facilitation) and exhibit more destructive behavior (including conflict, invalidation, and withdrawal) during discussions with the partner about a conflictual issue. Although, previous research studies have not examined the relationship between state-level anxiety and communication behavior in couple relationships, Barlow's (1998; 2002) prior research indicates that negative affect is associated with state anxiety or a cognitive appraisal of uncontrollability and unpredictability that is focused on potential future threat or danger. Additionally, Riskind and colleagues (2000; 2004) have examined insecure attachment as increasing individuals' cognitive vulnerability to anxiety. However, they have not enumerated the specific behavior in relationships that couples exhibit as a result of increased anxiety, stating only that anxiety contributes to poorer relationship-specific outcomes.

The fifth and sixth findings, that females' state anxiety acted as a mediating variable between attachment style, negative attributions, and the use of constructive behavior during a conflictual discussion with the partner, and eliminated the main effect of attachment style and negative attributions has not been examined by previous research. The present research moves towards addressing and filling an important gap in research literature on heterosexual couples. This finding is consistent with previous research and theory in the sense that anxiety has been found

by Barlow (1998; 2002) and Riskind and colleagues (2000; 2004) to play a motivating role in individual's behavior. Further Pretzer, Epstein, and Fleming (1991) found that negative attributions were correlated with negative communication toward the partner. However, previous research had not examined the relationship between state anxiety, attachment style, and negative attributions made about the partner's malicious intent and lack of love as well as its relationship to the specific the type of behaviors implemented in couple relationships.

Clinical Implications

Findings from this study underscore the important roles that state-level anxiety, attachment security, and negative attributions play in couples' communication behaviors, especially for females. Understanding the role of these aspects of couple relationships has implications for both clinical assessment and treatment of couples that present for therapy. In terms of the assessment component, it is important for clinical practitioners to assess each partner's degree of state-level anxiety, as well as each partner's working model of attachment, attributions made about the partner, and each partner's communication behavior. In this way, a clinical practitioner who observes destructive communication behavior will not only obtain a more comprehensive assessment of a given couple's behavior; it also may be possible to identify the potential factors (i.e., higher degrees of state-level anxiety, insecure attachment, and negative attributions made about one's partner) that may be contributing to the use of destructive behavior patterns in the couple's relationship. Understanding these contributing influences for destructive communication patterns may be the first step of intervention with distressed couples. As noted in the

theoretical and clinical literature on couple relationships (e.g., Epstein & Baucom, 2002), negative communication can be due to cognitive and affective factors in addition to behavioral skill deficits. The findings of this study indicate that insecure attachment styles, negative attributions, and state anxiety are among the cognitive and affective characteristics that influence the quality of couple communication.

Once a practitioner has completed the assessment phase with a given couple and has a clear picture of the type of communication behavior each partner in the couple employs, the present study's findings also have implications for clinical interventions with distressed couples. If a practitioner does in fact find destructive communication behavior in a given couple's relationship, the present study gives the practitioner at least three avenues to explore in order to address destructive communication behavior: namely higher levels of state anxiety, insecure attachment styles, and negative attributions made about one's partner. In fact, the cognitive-behavioral model used in this research provides a useful way of thinking about aspects of the couple that may be at work, contributing to destructive behavior. The present study found females who experienced higher degrees of state anxiety exhibited more destructive and less constructive behaviors. Consequently, a practitioner should consider state anxiety at the emotional level. Clinicians could draw upon relaxation techniques to facilitate each partner's ability to soothe themselves before they have a conversation with their partner. The cognitive-behavioral model has many useful techniques for deep breathing and muscle relaxation that can help people learn to self-soothe. In this way, one or both partners can be taught how to relax when they experience distressing emotions such as state

anxiety. Relaxation techniques can also help people to calm themselves in order to experience less worry and anxiety in the future.

A second method of addressing higher levels of state-anxiety (specifically in the case of females) is to examine females' cognitions about the partner and the quality of the couple's interaction. Specifically, what is each partner thinking about that perhaps leads them to a greater experience of state anxiety before interacting with their partner? Once a practitioner has identified cognitions that either partner holds that contribute to the experience of higher state-level anxiety (e.g., "My partner will not listen to me. My partner will become angry and start to yell at me when we discuss intimacy."), the practitioner can begin to challenge the cognitions and expectancies that each partner holds. For example, was there was a time when the partner listened, or a time when the couple was able to discuss intimacy without the conversation escalating to anger and yelling? If so, the practitioner can challenge one or both partners' notions that particular couple interactions always play out in a particular fashion. As attachment security and negative attributions made about the partner are discussed subsequently, there will be some degree of overlap, in the sense that negative cognitions contributing to state-level anxiety about the self and the partner may be a lack of attachment security that also leads to negative attributions about the partner. For example, one partner who reports a dismissing form of insecure attachment, a relationship schema comprised of a positive self-image, but a negative appraisal of the partner who is often seen as unreliable and inaccessible, may make negative attributions about the partner's lack of love for them as a result of the insecure attachment (Bartholomew & Horowitz, 1991). In this way, each partner's

attachment security acts on what they believe about themselves and the partner in the context of the relationship, possibly contributing to state anxiety and negative appraisals of the partner.

However, these cognitive interventions assume that the partners that hold cognitions that contribute to higher levels of state anxiety, do so falsely; or the threat one or both partners perceive is in an environment that, in fact, provides no true threat (i.e., there are not aspects of the relationship that are dangerous or threatening such as domestic violence). However, one of the inclusion criteria for the larger study from which the present study's sample was drawn was at least a low level of domestic violence, defined as physical and/or emotional abuse, having occurred within the past four months. While relaxation techniques and challenging each partner's cognitions can be helpful, these techniques are probably just a few of many interventions a practitioner would want to draw on when working with higher levels of state anxiety within couple relationships in which there has been history of domestic violence. That is to say, if a history of domestic abuse is present, partners may not be falsely appraising the relationship environment as currently being threatening to them, and the abuse in the relationship will need to be addressed directly by the practitioner as well. In fact, much of what one or both partners perceives as threatening is probably based on physical or emotional abuse that actually occurred in the relationship in the past. Still, if couple communication behavior is conceptualized as a cycle or a systemic interchange that both partners contribute to, helping partners who experience higher levels of state anxiety to calm themselves before interacting with the partner may facilitate the use of less destructive behavior and more constructive

behavior. Therefore more positive contributions to the couple's discussion can be made, serving to keep conversations from escalating negatively through destructive communication behavior.

Additionally, in examining each partner's working model of attachment, or relationship schema, it is helpful to assess the cognitions that each partner holds about the self and others in intimate couple relationships. By examining each partner's cognitions regarding intimate relationships, the practitioner can reach an enhanced understanding of each partner and the couple as a whole, helping each person to improve his or her own understanding of the lens through which they view themselves and the partner in the context of the intimate relationship. The present study did not find a direct relationship between insecure attachment and destructive behavior, only that insecurely attached males experience greater degrees of state-anxiety. This suggests that attachment security alone does not determine whether or not partners engage in constructive versus destructive behavior; in order to predict communication behavior, negative attributions held about the partner and state-level anxiety should also be assessed.

For females, the relationship between both attachment security and negative attributions and constructive behavior was mediated by state anxiety. Although there was not a direct relationship between insecure attachment and destructive behavior, as part of enhancing each partner's awareness of themselves and the relationship, the practitioner can also address how each partner's relationship schema influences his or her behavior, especially the type of communication behavior each partner employs in the context of the relationship. For example, consider a person who is insecurely

attached, reporting fearful attachment, a relationship schema that consists of negative views of both the self and the partner, often manifested in a fear of rejection and negative expectancies about the partner's availability (Bartholomew & Horowitz, 1991). An individual who reports this type of relationship schema is more likely to view themselves and the partner negatively in the context of the relationship. As a result of this relationship schema, a fearfully attached partner who views the partner negatively may exhibit destructive behaviors (categorized under the conflict category in the MICS-G) such as negative mind reading (e.g., "You don't care about me. You never want to help me."). In this way negative attributions fueled by insecure attachments contribute to destructive patterns of communication.

Another implication from the present study, addressing each partner's negative attributions, also lends itself to cognitive-behavioral conceptualization and intervention. The present study indicates that, for females there is a trend toward a relationship between the negative attributions each partner holds about the other in terms of lack of love for them and malicious intent influences and the communication behavior (constructive versus destructive) each partner employs. Additionally, when state anxiety was added to the equation as a mediator, there was a significant interaction for females in the relationship between attachment security, negative attributions, and the use of constructive behavior. These results point to a link between the cognitions a partner holds, their emotional state, and the behavior they exhibit, particularly when anxiety also is elicited. In the context of clinical intervention, it is helpful to examine the degree to which each partner holds negative attributions about the other. "When one person interprets the other's behavior as

being malevolently or selfishly motivated, or reflecting a lack of care or concern, it can trigger strong negative emotions and destructive behavior” (Epstein & Baucom, 2002, p.68). If one or both partners do in fact hold negative attributions about the partner, there are multiple cognitive-behavioral interventions that may be employed. A practitioner may examine each partner’s expectancies about the relationship, and how these expectancies influence his or her belief about the partner’s subsequent behavior (Epstein & Baucom, 2002). Negative expectancies about the partner are borne out of the partner’s past behavior, creating a sense of hopelessness for one or both partners (Epstein & Baucom, 2002). For example, a partner who has been the victim of multiple infidelities probably has very negative attributions about the partner (e.g., “She cheated on me because she does not love me and wants to hurt me.”), and negative expectancies about the future (e.g., “What is the use? She will just cheat on me again.”), creating a sense of hopelessness about the future. In this situation, a practitioner can help couples foster future-oriented cognitions that focus on the future being different from the past, providing a sense of hope for the couple. A practitioner might also help the couple focus on the positive behavior that occurs in the couple relationship.

Although the couples in the larger study did experience a mild to moderate level of domestic abuse, members of couples that have not had abuse in the relationship may selectively attend to the partner’s behavior, or incorrectly make negative attributions about the partner’s behavior. For example, a husband whose wife returns home late from work each evening may interpret his wife’s behavior negatively, attributing her lateness to a lack of love for him. In situations where it

seems partners have misconstrued the partner's behavior negatively, a practitioner may work to challenge the negative attributions one partner holds by addressing how the other partner's behavior may have been misinterpreted as malicious or lacking love.

Once each partner examines the destructive communication behavior that he or she utilizes (e.g., blaming the partner, denying responsibility for a problem, and interrupting the partner) in discussions with the partner, the cognitive-behavioral model emphasizes skills training (e.g., problem solving techniques such as describing the problem and brainstorming for solutions) as a means of teaching couples more constructive communication behaviors to replace destructive behavior. The cognitive-behavioral model employs such useful communication enhancing techniques as speaker-listener exercises, teaching each partner how to describe the issue they would like to address, incorporating statements of approval and acceptance for the partner, proposing positive solutions and compromises, and accepting responsibility for past or present issues in the relationship. In helping couples recognize the destructive communication behavior they employ as well as the negative attributions they may hold about the partner, the cognitive-behavioral model also provides space for psychoeducation. Partners may benefit from understanding the potential influences that may be contributing to the destructive communication behavior in their relationship as well as why and how destructive communication behavior occurs.

After a practitioner has addressed state anxiety on the emotional and cognitive levels, as well as examined the attachment styles each partner in a given couple holds

as well as negative attributions they might have about the partner, it is also important to consider how state anxiety may act as a mediator between attachment security, negative attributions made about the partner, and the use of constructive versus destructive behavior in the relationship. As stated above, there are mechanisms in the cognitive-behavioral model to address attachment security, negative attributions, and communication behavior directly, but it is also important to understand the relationship, or the extent to which state anxiety mediates each of these variables in the couple's relationship.

After a practitioner has observed destructive communication patterns in a couple's relationship, and assessed other contributing factors, (i.e., each partner's attachment security, negative attributions about the partner, and state anxiety) it is necessary, with the practitioner's guidance, for the couple to begin to implement constructive communication behavior in their daily interactions. Practicing new, constructive behavior in the place of destructive behavior may begin in a clinical setting where new skills are taught by the practitioner, and then practiced by the couple with the practitioner as a coach. However, in employing behavioral interventions with a couple, the practitioner should also address each partner's cognitions and emotions (namely state anxiety) using the techniques described above as well. In fact, solely implementing behavioral interventions does not take into consideration each partner's cognitions and emotions. The emotions and cognitions each partner holds will contribute to the partner's being able to make behavioral changes in the form of more constructive communication, and in fact, if not addressed

may make it very difficult for the couple to create meaningful and lasting behavioral change.

Once the couple has learned new skills for constructive behavior, practicing the skills can be extended outside the clinical setting as assigned homework, with the practitioner following up on the use of the new communication behaviors at the beginning of each clinical meeting. Each partner may also be encouraged to keep a journal or record of constructive and destructive behavior and the feelings associated with the interchanges that took place between themselves and the partner during the week. When partners start to have more positive emotions associated with more constructive behavior, these positive emotions can serve to reinforce the implementation of constructive behaviors.

Limitations

The present study did encounter some limitations that may have affected some of the outcomes. It is also possible that these limitations could be improved in future research. First, the clinical nature of the couple sample that was studied places limitations on how generalizable this study is to couples that are not being seen clinically for marital distress. As noted previously, the couple population used for this research study all had DAS scores under 100, indicating significant marital distress. Therefore, it is important to consider that this study's findings may not be applicable to non-distressed or less-distressed couples that are not seeking clinical treatment.

A second limitation involves the sample size available for the present study. Self-report and behavioral data were only available for 52 couples, and for some of the analyses, not all participants could be included due to missing or incomplete information. Although there is reason to believe that the results from this study are valid and replicable, the small sample size required the three constructive behavior dimensions and the three destructive behavior dimensions to be collapsed into two variables, constructive and destructive behaviors. Although the creation of two variables that each represented constructive and destructive behavior increased the statistical power of the analyses, it may have detracted from some of the richer details in this research study. For example, a larger sample size may have been able to see a relationship, for females, between state anxiety and the type of communication behaviors employed with the partner.

A third limitation of the present study is that the larger study required at least one partner to report mild to moderate levels of physical, verbal, and/or psychological abuse had taken place in the context of the relationship in the past four months, with no violent incidents resulting in medical treatment in the past four months. Therefore, the present study is examining state anxiety in a population where both partners have experienced a mild to moderate level of abuse in the past four months in the relationship. Not only might the experience of abuse in the relationship contribute to increased state anxiety for this population, but it also has implications for the population that this research study can be generalized to, namely couples that have experienced mild to moderate levels of abuse within the last four months in their relationship.

A fourth limitation of the present study involves the standardized batteries used to measure each partner's attachment style (RQ) and each partner's degree of state-level anxiety (PANAS) before the 10-minute taped discussion with the partner. The RQ asks the respondent to pick the relationship style that is most similar to the way they behave in relationships with people in general. Respondents are then asked to rate how similar all the relationships styles are to them. And the PANAS only provided four items used to gage the degree of state-level anxiety each partner experienced before the 10-minute taped discussion. Given the limitations of the research batteries that were used to measure attachment security and state-level anxiety, improved measures for these variables may provide greater detail about respondents' attachment security and state-level anxiety.

Finally, although the MICS-G has been shown to be highly reliable and has demonstrated a high degree of discriminant and concurrent validity, the MICS-G is not a completely value-free coding system. Factors involving different genders, ethnicities, and racial backgrounds of both coders and study participants must be taken into consideration when examining a diverse sample using a uniform research battery. That is to say that coders of differing backgrounds than the study's participants may not capture behavior nuances, such as voice tone or inflection, from demographic groups of which they are not members.

Research Implications

A significant amount of data used for the present study examined the type of communication behavior couples utilized during a 10-minute discussion with the

partner about a slightly to moderately conflictual issue in the relationship. It seems quite remarkable that couples, on their second meeting with a therapist, while hooked up to microphones and left alone in a room for 10 minutes, behave in such a way that coders using the MICS-G coding system are able to identify behavior patterns that reflect broad communication behavior patterns that are significant in the couples' relationships. In this way, results from the present study and other research studies indicate that coders are able to identify meaningful constructive and destructive behavioral cues as well as differentiate between distressed and non-distressed couples presenting for clinical treatment. The present study also further confirms that couples do not need to be in an environment they are familiar with in order to have a discussion about a relationship issue that captures the broader qualities of constructive and destructive behavior patterns each partner employs.

Given that insecurely attached females were found to exhibit less constructive behavior, there are important implications for the relationship between attachment security and the type communication behavior (constructive versus destructive) couples employ. This finding sheds more light on factors that contribute to the use of constructive versus destructive behavior in couple relationships. In this way, attachment security may be an important component in couples' use (specifically females) of constructive and destructive behavior.

Due to some of the present study's limitations, namely its small sample size limiting the richness of detail available in the realm of attachment security and communication behavior, future researchers may wish to replicate the study using a larger sample size. A larger participant pool would allow the investigator to run

multiple regression analyses with the six categories of communication behavior in order to provide enhanced detail about the utilization of these behaviors, (i.e., conflict, problem solving, validation, invalidation, facilitation, and withdrawal) as opposed to collapsing the three constructive and three destructive behaviors into two categories.

In addition to a larger sample size, future researchers may wish to compare a clinical sample (as used in the present study) to a non-clinical sample (a couple population that has DAS scores over 100 and is not presently seeking clinical services for their relationship). Future researchers may also wish to examine populations in which both partners do not report a mild to moderate level of abuse in the relationship during the past four months in order to better appreciate the relationship between state anxiety, attachment security, negative attributions, and communication behavior.

Future researchers may also wish to examine the relationship between each partner's attachment style, their negative attributions about the partner's malicious intent and lack of love for them, and the use of constructive behavior during a discussion about a conflictual relationship issue in greater detail. Due to the nature of this study's sample size (n=52), it was not possible to examine Bartholomew & Horowitz (1991) differing categories of insecure attachment (i.e., dismissing, preoccupied, and fearful) and the interaction these differing insecure attachments may have on the use of constructive and destructive behaviors. A larger sample size with participants reporting each type of attachment (as opposed to using a dichotomized variable) may yield more detailed insight into the interaction between attachment style, attributions made about the partner, and the use of constructive behavior.

Additionally, future researchers may be able to better understand why it is that this study found the smallest mean for constructive behaviors when females reported insecure attachment and low negative attributions about the partner.

In examining attachment, future researchers may also wish to use substitute the RQ with a different measure to assess attachment style. On the RQ, the categories delineating secure versus insecure attachment style are relatively simplistic. A measure that employs multiple questions to construct the participants' attachment style may yield a richer research analysis. Furthermore, the same can be said for the PANAS. Future researchers may wish to employ a different battery to measure state-level anxiety based on a broader range of questions that utilize a broader range of emotions that can comprise the subjective experience of state anxiety.

An unanticipated pattern that emerged was the gender difference in the number of significant results. Within the sample studied, females had far more significant results than males. Drawing on the above suggestions (i.e., a larger sample size, a non-clinical sample, and couples without the presence of abuse in their relationship), future researchers may wish to examine gender patterns to determine whether or not the present research is indicative of important gendered phenomena occurring within the context of distressed clinical couple samples.

Another implication for future research may be the examination of other factors in the couple relationship that contribute to the variables of higher state anxiety, insecure attachment, negative attributions, and communication behavior. Perhaps broadening the lens through which the couples in the present study were viewed to include assessments of social support, stressful events (e.g., financial

difficulties), relationship stability and commitment, and other environmental factors that may be acting on the couple, and traumatic symptoms or events that each partner may have experienced may give future researchers a richer picture of the couples as well as allow for an enhanced understanding of other factors that may interact with the variables assessed in this study.

Finally, future researchers may provide important insight into how the racial and ethnic backgrounds of the population studied influence the MICS-G coders' communication behavior scoring. The diverse sample used for the present study included roughly half of the participants rating themselves as being members of minority groups, including African American, Hispanic, and Native American, as well as some partners rating themselves as other, which was meant to be a category to encompass minority groups whose race was not explicitly specified on the day 1 assessment form. As couples with differing racial and ethnic backgrounds may have different means of communicating (e.g., patterns of speech, tone, intonation, voice inflections, word choice and emphasis, and volume), MICS-G coders may interpret these speech patterns differently than the partner intended, especially if the coder is not from or familiar with a given ethnic or racial group for which they are asked to code communication samples. Therefore, future researchers may also want to examine the demographics of the coder and the couples being coded as a means of gaining insight into nuanced behavior between racial and ethnic groups that may yet to be identified using this coding system.

Conclusion

Despite its limitations, this study on heterosexual couples has advanced our knowledge on the relationships among attachment security, attributions made about the partner regarding malicious intent and lack of love, state anxiety, and the use of constructive and destructive behavior. It has expanded our understanding of the implications that state-level anxiety has on couple interaction, as well as enumerating state anxiety as a mediating variable between attachment security, negative attributions about the partner, and use of constructive and destructive behavior in some circumstances.

The findings from this research study may contribute to future clinical interventions for couples experiencing state-level anxiety. Further, practitioners' knowledge about factors that contribute to constructive and destructive behavior in heterosexual couple relationships can be enhanced by the present study's findings. Additionally, the results from the present study may inspire future research to be directed toward couples' relationships and state anxiety.

Appendix A

Relationship Questionnaire (RQ)

1. The following are descriptions of four general relationship styles that people often report. Please circle the letter corresponding to the style that best describes you or is closest to the way you are in relationships with **PEOPLE IN GENERAL.**
 - A. It is relatively easy for me to be emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others not accept me.
 - B. I am somewhat uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or depend on them. I sometimes worry that I will be hurt if I allow myself to become too close to others.
 - C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, and I sometimes worry that others don't value me as I value them.
 - D. I am comfortable without close relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

2. Now please rate each of the relationship styles above according to the extent to which you think each description corresponds to your general relationship styles.

	Not at all like me		Somewhat like me			Very much like me	
Style A.	1	2	3	4	5	6	7
Style B.	1	2	3	4	5	6	7
Style C.	1	2	3	4	5	6	7
Style D.	1	2	3	4	5	6	7

Appendix B

Dyadic Adjustment Scale – Assessment (DAS)



DAS (ASSESSMENT)

Gender: _____ Date of Birth: _____ Therapist Code: _____ Family Code: _____

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

	<i>Always Agree</i>	<i>Almost Always Agree</i>	<i>Occasionally Disagree</i>	<i>Frequently Disagree</i>	<i>Almost Always Disagree</i>	<i>Always Disagree</i>
1. Handling family finances						
2. Matters of recreation						
3. Religious matters						
4. Demonstrations of affection						
5. Friends						
6. Sex relations						
7. Conventionality (correct or proper behavior)						
8. 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						
<hr/>						
	<i>All the time</i>	<i>Most of the time</i>	<i>More often than not</i>	<i>Occasionally</i>	<i>Rarely</i>	<i>Never</i>
16. How often do you discuss or have you considered divorce, separation or terminating your relationship?						
17. How often do you or your partner leave the house after a fight?						
18. In general, how often do you think that things between you and your partner are going well?						
19. Do you confide in your partner?						

	<i>All the time</i>	<i>Most of the time</i>	<i>More often than not</i>	<i>Occasionally</i>	<i>Rarely</i>	<i>Never</i>
20. Do you ever regret that you married (or lived together)?						
21. How often do you or your partner quarrel?						
22. How often do you and your partner "get on each others' nerves"?						

HOW OFTEN WOULD YOU SAY THE FOLLOWING EVENTS OCCUR BETWEEN YOU AND YOUR MATE?
CIRCLE YOUR ANSWER.

23. Do you kiss your partner?	EVERYDAY	ALMOST EVERYDAY	OCCASIONALLY	RARELY	NEVER	
24. Do you and your partner engage in outside interests together?	ALL OF THEM	MOST OF THEM	SOME OF THEM	VERY FEW OF THEM	NONE OF THEM	
25. Have a stimulating exchange of ideas?	NEVER	LESS THAN ONCE A MONTH	ONCE OR TWICE A MONTH	ONCE OR TWICE A WEEK	ONCE A DAY	MORE OFTEN
26. Laugh together?	NEVER	LESS THAN ONCE A MONTH	ONCE OR TWICE A MONTH	ONCE OR TWICE A WEEK	ONCE A DAY	MORE OFTEN
27. Calmly discuss something?	NEVER	LESS THAN ONCE A MONTH	ONCE OR TWICE A MONTH	ONCE OR TWICE A WEEK	ONCE A DAY	MORE OFTEN
28. Work together on a project?	NEVER	LESS THAN ONCE A MONTH	ONCE OR TWICE A MONTH	ONCE OR TWICE A WEEK	ONCE A DAY	MORE OFTEN

THESE ARE SOME THINGS ABOUT WHICH COUPLES SOMETIMES AGREE AND SOMETIMES DISAGREE. INDICATE IF EITHER ITEM BELOW CAUSES DIFFERENCES OF OPINION OR HAVE BEEN PROBLEMS IN YOUR RELATIONSHIP DURING THE PAST FEW WEEKS. CHECK "YES" OR "NO."

29. Being too tired for sex. Yes ___ No ___
30. Not showing love. Yes ___ No ___
31. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree of happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship.

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

32. Which of the following statements best describes how you feel about the future of your relationship? Check the statement that best applies to you.
- ___ 1. I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- ___ 2. I want very much for my relationship to succeed, and will do all I can to see that it does.
- ___ 3. I want very much for my relationship to succeed, and will do my fair share to see that it does.
- ___ 4. It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.
- ___ 5. It would be nice if my relationship succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
- ___ 6. My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Appendix C

Relationship Issues Survey (RIS)

There are a variety of areas in a couple's relationship that can become sources of disagreement and conflict. Please indicate how much each of the areas is **presently** a source of disagreement and conflict in your relationship with your partner. Select the number on the scale which indicates how much the area is an issue in your relationship.

- 0 = Not at all a source of disagreement or conflict
- 1 = Slightly a source of disagreement or conflict
- 2 = Moderately a source of disagreement or conflict
- 3 = Very much a source of disagreement or conflict

- | | |
|---|--|
| _____ 1. Relationships with friends | _____ 16. Leisure activities and interests |
| _____ 2. Career and job issues | _____ 17. Household tasks |
| _____ 3. Religion or personal philosophy of life | _____ 18. Amount of time spent together |
| _____ 4. Finances (income, how money is spent, etc.) | _____ 19. Affairs |
| _____ 5. Goals and things believed important in life | _____ 20. Privacy |
| _____ 6. Relationship with family of origin (parents, siblings) | _____ 21. Honesty |
| _____ 7. Sexual relationship | _____ 22. Expressions of affection |
| _____ 8. Child rearing/parenting approaches | _____ 23. Trustworthiness |
| _____ 9. Personal habits | _____ 24. Alcohol and drugs |
| _____ 10. Amount of commitment to the relationship | _____ 25. Taking care of possessions |
| _____ 11. Understanding of each other's stresses or problems | _____ 26. Personal standard for neatness |
| _____ 12. Daily life schedules and routines | _____ 27. How decisions are made |
| _____ 13. Personal manners | _____ 28. Personal grooming |
| _____ 14. How negative thoughts and emotions are communicated | |
| _____ 15. How positive thoughts and emotions are communicated | |

Appendix D

Marital Interaction Coding System – Global (MICS-G)

SPOUSE SCORING SHEET

Rater _____ Couple # _____ H/W _____

	Low 0	1	Moderate 2	3	4	High 5
Cue Impression	Category Rating					
<i>CONFLICT</i>						
1. Complain						_____
2. Criticize						_____
3. Negative mindreading						_____
4. Put downs/insults						_____
5. Negative commands						_____
6. Hostility						_____
7. Sarcasm						_____
8. Angry/bitter voice						_____
<i>PROBLEM SOLVING</i>						
1. Problem description						_____
2. Proposing solution (+/-)						_____
3. Compromise						_____
4. Reasonableness						_____
<i>VALIDATION</i>						
1. Agreement						_____
2. Approval						_____
3. Accept responsibility						_____
4. Assent						_____
5. Receptivity						_____
6. Encouragement						_____
<i>INVALIDATION</i>						
1. Disagreement						_____
2. Denial of responsibility						_____
3. Changing the subject						_____
4. Consistent interruption						_____
5. Turn-off behaviors						_____
6. Domineering behaviors						_____
<i>FACILITATION</i>						
1. Positive mindreading						_____
2. Paraphrasing						_____
3. Humor						_____
4. Positive physical contact						_____
5. Smile/laugh						_____
6. Open posture						_____
<i>WITHDRAWAL</i>						
1. Negation						_____
2. No response						_____
3. Turn away from the partner						_____
4. Increasing distance						_____
5. Erects barriers						_____
6. Noncontributive						_____

Appendix E

Marital Attitude Survey (MAS)

Please circle the number which indicates how much you agree or disagree with each statement this week, using the rating scale below.

Rating Scale:

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

LL*	1. When we aren't getting along I wonder if my partner loves me.	1	4	5
		2	3	4
MI**	2. My partner doesn't seem to do things just to bother me .	1	2	3
	3. My personality would have to change for our relationship to improve.	1	2	3
MI	4. My partner intentionally does things to irritate me.	1	2	3
	5. Even if my partner's personality changed we still wouldn't get along any better.	1	2	3
MI	6. It seems as though my partner deliberately provokes me.	1	2	3
	7. If my partner did things differently we'd get along better.	1	2	3
	8. My partner's personality would have to change for us to get along better.	1	2	3
	9. Any trouble we have getting along with each other is because of the type of person I am.	1	2	3
	10. I don't think that the things I say and do make things worse between us.	1	2	3
	11. Any problems we have are caused by the things I say and do.	1	2	3
	12. I don't think our marriage would be better if my partner was a different type of person.	1	2	3
	13. Even if my personality changed, my partner and I still wouldn't get along any better.	1	2	3
	14. The way my partner treats me determines how well we get along.	1	2	3
	15. Whatever problems we have are caused by the things my partner says and does.	1	2	3
	16. My partner and I would get along better if it weren't for the type of person s/he is.	1	2	3
MI	17. My partner doesn't intentionally try to upset me.	1	2	3
LL	18. When things aren't going well between us, I feel like my partner doesn't love me.	1	2	3
	19. Whatever difficulties we have are not because of the type of person I am.	1	2	3
LL	20. What difficulties we have don't lead me to doubt my partner's love for me.	1	2	3
LL	21. When things are rough between us it shows that my partner doesn't love me.	1	2	3
	22. If I did things differently my partner and I wouldn't have the conflicts we have.	1	2	3
	23. My changing how I act wouldn't change how our marriage goes.	1	2	3
MI	24. I'm sure that my partner sometimes does things just to bother me.	1	2	3
LL	25. Even when we aren't getting along, I don't question whether my partner loves me.	1	2	3
MI	26. I think my partner upsets me on purpose.	1	2	3
LL	27. When my partner isn't nice to me I feel like s/he doesn't love me.	1	2	3
MI	28. I'm certain that my partner doesn't provoke me on purpose.	1	2	3
LL	29. Even when we have problems I don't doubt my partner's love for me.	1	2	3
	30. The things my partner says and does aren't the cause of whatever problems come up between us.	1	2	3
MI	31. I doubt that my partner deliberately does thing to irritate me.	1	2	3

* "LL" Indicates the item as being included in the lack of love subscale.

** "MI" Indicates the item as being included on the malicious intent subscale.

Appendix F
Positive and Negative Affect Scales (PANAS)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Select the number from the scale that shows your feelings towards/about your partner **at this very moment**.

1
very slightly
or not at all

2
a little

3
moderately

4
quite a bit

5
extremely

_____ 1. interested

_____ 12. irritable

_____ 2. distressed

_____ 13. alert

_____ 3. excited

_____ 14. ashamed

_____ 4. upset

_____ 15. inspired

_____ 5. strong

_____ 16. nervous (assesses anxiety)

_____ 6. guilty

_____ 17. determined

_____ 7. scared (assesses fear)

_____ 18. attentive

_____ 8. hostile

_____ 19. jittery (assesses anxiety)

_____ 9. enthusiastic

_____ 20. active

_____ 10. proud

_____ 21. afraid (assesses fear)

_____ 11. comfortable

_____ 22. want revenge

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