

ABSTRACT

Title of Thesis:

PARTNER'S CONFLICT BEHAVIOR AND
RECIPIENT'S ATTACHMENT STYLE AS
PREDICTORS OF PERCEIVED CRITICISM IN
CLINICAL COUPLES

Kara Lee Savory, Master of Science, 2011

Thesis Directed By:

Professor Norman B. Epstein,
Department of Family Science

The association between critical communication behavior exhibited by one member of a couple during a conversation and the amount of criticism that is perceived by the person's partner was explored. The study investigated whether that association is moderated by the degrees to which the recipient of messages identifies with each of four attachment styles (secure, fearful, preoccupied, and dismissing). The sample was 95 couples who had sought therapy at a university-based couple and family therapy clinic. Each couple engaged in a 10-minute discussion of a conflictual issue in their relationship, which was video-recorded and subsequently coded for constructive and destructive communication behavior, including criticism. For both men and women, the amount of actual criticism predicted the amount perceived. Attachment styles did not directly predict the amount of criticism perceived, but there was evidence that for both genders attachment styles moderated the relationship between the degree of conflict behavior exhibited by the partner and the amount of criticism that the recipient perceived.

PARTNER'S CONFLICT BEHAVIOR AND RECIPIENT'S ATTACHMENT STYLE
AS PREDICTORS OF PERCEIVED CRITICISM IN CLINICAL COUPLES

by

Kara Lee Savory

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Science,
2011

Advisory Committee:
Professor Norman B. Epstein, Chair
Associate Professor Leigh A. Leslie
Instructor Carol A. Werlinich

© Copyright by
Kara Lee Savory
2011

Acknowledgments

To my committee, family and friends:

Who in their life hasn't planed a peach pit just hoping that somehow a seedling would grow? And then they move on to some other adventure, and if it comes-up well, they don't even know. That's one way of picturing your style of living. You've planted ideas and dreams unaware. You've noticed somebody whose heart needs attention and planted a positive feeling in there. It's part of your nature. You may not remember the kind and encouraging things that you've done... But everywhere, "peach pits" are growing like crazy, and people are blooming- (I know it- I'm one!)

I would like to acknowledge those in academia who have inspired this "peach pit," perhaps without even knowing their impact. First, I would like to thank my thesis advisor Dr. Norman Epstein for his time, hard work and dedication to guiding me through this process. You make it look so easy; I couldn't help but be inspired by you and your achievements. You ignited my desire to work toward becoming a great researcher and to persevere when it was most challenging. I would also like to thank Dr. Carol Werlinich and Dr. Leigh Leslie who years ago touched my life in special ways and planted the seed of hope and determination a little deeper. I want to thank you both for your constant support, powerful insight, experience and encouragement. You both have provided instrumental constructive criticism while also supporting me and challenging me to think critically about my work and its implications. Dr. Laura Evans and Dr. Lindsey Hoskins your paths have shown me that reaching your dreams is certainly possible with hard work and determination. You all have set the bar high.

To my family and friends, each of you have watered and fed this "peach pit" in your own special way helping me flourish, and grow into the person I am today. Thank you for your contributions to my life and your excitement in my achievements.

I would like to thank Brian Kampel, for your emotional support and encouragement. You were a constant friend, and companion, and you believed in me when I failed to do so. Thank you for allowing me the time and space to create this document, and for keeping me focused on the future.

To my cohort: Adam B., Adam L., Ash, Ciara, India, Kat, Sherylls, Spencer and Traci- my surrogate siblings. There isn't enough room here to detail the ways you have supported me both professionally and personally over the past two demanding years- I will forever be indebted and yet blessed to call you colleagues, but mostly, to call you friends. You all are the rock to my lighthouse.

A special thank you and dedication goes out to my Mom; the inspiration for me to dig deep, stand tall, and find the strength to do great things. I strive everyday to be a little wiser, a little friendlier, a little more encouraging and a lot more generous- striving to be a little more-You. Our "story" is why I am now succeeding in my life dream. Thank you in everyway, for all that you do. I love you.

TABLE OF CONTENTS

Acknowledgements.....	ii
Table of Contents.....	iii
List of Tables.....	v
List of Figures.....	vii
Chapter 1: Introduction.....	1
Statement of the Problem.....	1
Communication in close relationships.....	1
Types of communication in couple relationships	2
Effects of negative communication on the couple.....	4
Impact of communicator characteristics and behavior on communication.....	5
Gender differences in communication as an obstacle to co-regulation....	7
Communicator characteristics as communication filters.....	8
Reducing gaps between intended and received messages.....	10
Attachment styles as a communicator characteristic.....	11
Attachment styles and the effects on relationships.....	12
Perceived criticism.....	13
Purpose.....	14
Chapter 2: Literature Review.....	16
Introduction to the Literature.....	16
Negative couple communication behavior.....	16
Perceived criticism.....	17
Attachment styles and their potential as filters for communication.....	20
Gender and attachment styles.....	26
Gap in the Literature.....	27
Theoretical Base for the Study.....	28
Definitions of Variables.....	30
Independent Variables.....	30
Gender.....	30
Actual conflict behavior (criticism).....	31
Moderator Variables.....	31
Attachment styles.....	31
Secure attachment.....	31
Fearful attachment.....	32
Preoccupied attachment.....	32
Dismissing attachment.....	32
Dependent Variables.....	32
Perceived criticism.....	32
Hypotheses.....	33
Research Question.....	36
Gender difference.....	36
Chapter 3: Method	37
Sample	37
Procedure.....	44
Measures.....	45

Actual conflict behavior (criticism).....	46
Attachment measure.....	49
Perceived criticism measure.....	51
Gender.....	45
Chapter 4: Results	53
Chapter 5: Discussion	68
Summary of Overall Findings.....	68
Understanding the Results within the Context of Previous Research.....	73
Limitations of Current Study.....	86
Recommendations for Future Research.....	90
Clinical Implications.....	92
Conclusion.....	94
Appendices: Measures	81
Appendix A: Relationship Questionnaire.....	82
Appendix B: Hooley and Teasdale Scale.....	83
Appendix C: Marital Interaction Coding System- Global.....	84
Appendix D: Couple Information and Instructions.....	85
Appendix E: Relationship Issues Survey.....	87
Appendix F: Thesis Figure.....	88
References.....	104

List of Tables

Table 1: Men’s Current Employment Status	41
Table 2: Women’s Current Employment Status.....	41
Table 3: Men’s Race	42
Table 4: Women’s Race.....	42
Table 5: Men’s Highest Level of Education	43
Table 6: Women’s Highest Level of Education	43
Table 7: Variables and Measures Used to Assess Them	45
Table 8: Correlations Among Styles of Attachment for Men	54
Table 9: Correlations Among Styles of Attachment for Women	54
Table 10: Multiple Regression Analysis Predicting Men’s Perceived Criticism Using Men’s Secure Attachment Style	56
Table 11: Multiple Regression Analysis Predicting Women’s Perceived Criticism Using Women’s Secure Attachment Style.....	57
Table 12: Multiple Regression Analysis Predicting Men’s Perceived Criticism Using Men’s Fearful Attachment Style	57
Table 13: Multiple Regression Analysis Predicting Women’s Perceived Criticism Using Women’s Fearful Attachment Style	58
Table 14: Multiple Regression Analysis Predicting Men’s Perceived Criticism Using Men’s Preoccupied Attachment Style	58
Table 15: Multiple Regression Analysis Predicting Women’s Perceived Criticism Using Women’s Preoccupied Attachment Style	58
Table 16: Multiple Regression Analysis Predicting Men’s Perceived Criticism Using Men’s Dismissing Attachment Style	59
Table 17: Multiple Regression Analysis Predicting Women’s Perceived Criticism Using Women’s Dismissing Attachment Style	59
Table 18: Perceived Criticism Cell Means for Interaction Between Men’s Secure Attachment and Women’s Conflict Behavior.....	62

Table 19: Perceived Criticism Cell Means for Interaction Between Women’s Secure Attachment and Men’s Conflict Behavior.....	62
Table 20: Perceived Criticism Cell Means for Interaction Between Men’s Fearful Attachment and Women’s Conflict Behavior.....	63
Table 21: Perceived Criticism Cell Means for Interaction Between Women’s Fearful Attachment and Men’s Conflict Behavior.....	64
Table 22: Perceived Criticism Cell Means for Interaction Between Women’s Preoccupied Attachment and Men’s Conflict Behavior.....	65
Table 23: Perceived Criticism Cell Means for Interaction Between Men’s Dismissive Attachment and Women’s Conflict Behavior.....	66
Table 24: Perceived Criticism Cell Means for Interaction Between Women’s Dismissive Attachment and Men’s Conflict Behavior.....	66
Table 25: Summary of Overall Findings.....	68

List of Figures

Figure 1: Model of Attachment Style as a Moderator in the Relationship Between Conflict Behavior and Perceived Criticism and the Impact that Attachment Style Directly has on Perceived Criticism.....	103
--	-----

Chapter 1: Introduction

Statement of the Problem

Communication in close relationships. Intimate partner relationships can contribute to happiness, satisfaction, and meaning in individuals' lives (Cushman & Cahn, 1985), but conflict and dissolution of intimate relationships can also be among the most stressful experiences in people's lives, resulting in a variety of physical and mental health problems (Bruce & Kim, 1992; Gyll, Cutrona, Burzette, & Russell, 2010; Prigerson, Maciejewski, & Rosenheck, 1999; Smith, Glazer, Ruiz, & Gallo, 2004). Anger, hostility, and suppressed rage in interpersonal relationships have been found to be related to hypertension and coronary heart disease (Appel, Holroyd & Gorkin, 1983). Consequently, it is important to understand factors that influence the success or failure of couple relationships.

Epstein and Baucom (2002) note that "negative behaviors and communication appear to distinguish between distressed and nondistressed couples, whereas positive behaviors may play a role in elevating nondistressed couples into the range of more highly satisfied couples" (p. 62). Distressed couples are identified as those who have insufficient communication and problem-solving skills (Karney & Bradbury, 1995) and frequent reciprocal negative interactions (Gottman, 1979, 1994; Jacobson & Margolin, 1979). Past research has established that satisfied couples exhibit a higher rate of positive communication during conversations than do distressed couples (Gottman & Krokoff, 1989; Schaap, 1984) and that happier partners tend to use more beneficial ways of managing conflict (Oggins, Veroff, & Leber, 1993). Happy couples also use more messages of assent, approval, and caring (Schaap, 1984); are more likely to suggest

compromises (Cousins & Vincent, 1983); display humor, smiling, and laughing; show positive physical touch; and exceed dissatisfied couples in problem solving statements (Margolin & Wampold, 1981). In contrast, Gottman (1994) found that negative messages involving criticism and especially contempt, rather than expressions of anger, strongly predict separation and divorce. Epstein and Baucom (2002) suggest that critical comments and contemptuous feelings are so damaging to the partner relationship because they convey a global, negative attitude and evaluation of the partner and his or her character.

Thus, overall there is a large body of prior research indicating that constructive, effective communication between partners is associated with greater relationship satisfaction and stability. A variety of forms of verbal and nonverbal couple communication have been found to have significant effects on partners' relationship satisfaction, as well as their individual well being and mental health. The next section summarizes findings regarding types of communication and their consequences.

Types of communication in couple relationships. Overall, three major purposes of couple communication are (a) to *convey information* about one's current emotions, needs, or preferences (e.g., "I'm tired.") or circumstances (e.g., "I heard it's going to snow tomorrow."), (b) to try to influence one's partner (e.g., "I would like you to spend more time with me."), and (c) to *solve problems* by identifying an issue that needs to be resolved (e.g., "Our credit card debt is increasing.") or by generating and evaluating potential solutions (e.g., "We could make a budget and keep records of our weekly expenses.") (Epstein & Baucom, 2002). Numerous typologies have been used to categorize and code partners' communication behaviors as they express their feelings,

attempt to influence each other, or engage in problem-solving interactions (see Heyman, 2001, 2004 and Kerig & Baucom, 2004 for reviews). These typologies identify both negative verbal and nonverbal communication behaviors (e.g., put-downs, blaming, criticism, nonverbal displays of negative affect) and positive communication behaviors (e.g., reasoning, proposing a solution to a problem, nonverbal displays of positive affect, validation, support).

Research by Overall, Fletcher, Simpson and Sibley (2009) has investigated partners' communication behaviors associated with their attempts to change each other's beliefs or behaviors as a way to improve the relationship quality. These attempts are called partner regulation: endeavors at changing a behavior or characteristic of their partner that they find displeasing or offensive. Overall et al. (2009) note,

One key to successful regulation attempts should be the kind of communication strategies people use to change their relationships. Different strategies are likely to vary in their benefits (i.e., successfully producing desired change) and costs (i.e., reducing relationship satisfaction). For example, direct negative strategies (e.g., nagging or demanding change) are likely to be poorly received by the targeted partner and, accordingly, may be less successful than indirect positive strategies (e.g., using positive affect to soften the regulation attempt). On the other hand, positive and subtle strategies may keep relationships buoyant in the short term but be less successful at changing partner behavior across time. (p. 620)

Because most of the research on communication patterns has been correlational, and it has not been possible to identify the direction of causality, it is unclear whether

relationship quality is determined by the quality of the couple's communication, whether negative conflict communication arises from the low-quality of the relationship, or whether the link between communication and relationship quality is bi-directional. However, Gottman's (1994) longitudinal studies have identified patterns of negative communication that directly predict couples' subsequent risk of ending their relationships.

Effects of negative communication on the couple. Pearce and Halford (2008) describe negative communication, based on the earlier work of Halford, Osgarby, and Bouma (2000), as including both verbal and nonverbal messages. They explain that negative communication includes criticism (negative judgment, condemnation, or devaluation of the partner), justification (defense of one's own behavior or position, including through denial) disagreement with one's partner, negative suggestion (indicating the need for change in a threatening or demanding way), withdrawal (verbal or non verbal lack of participation in the conversation), and negative affect (angry or depressed voice tone, expression, posture, and movement). Criticism is one of the four components of destructive couple communication that Gottman (1994) has labeled the "four horsemen of the apocalypse" (criticism, defensiveness, contempt, and stonewalling) that contribute to the deterioration of couples' relationships. Gottman differentiates between complaints, which are specific statements of displeasure or negativity, and criticism, which is more global and tends to have a blaming undertone, negatively evaluating one's partner's behavior or character. Criticism can escalate and become a part of negative conflict behavior that tends to have negative effects on the recipient's mental health, such as physical health problems, anxiety and depression, lower general feelings

of well-being, decreased self-esteem, reduced sociability, and reticence to communicate (Schrodt, Witt, & Messersmith, 2008). Klein and Milardo (2000) state, “Although couples may spend relatively little time actually engaged in conflict, the management of conflict has important consequences for their relationship and personal well-being” (p. 618). Overall et al. (2009) conclude that the general findings from hundreds of studies over the past 30 years suggest that engaging in “hostile, critical, or demanding communication behavior, and reciprocating partners’ negative influence attempts, leads to lower relationship satisfaction” (p. 621).

It is also essential to note that there are factors that both the sender and receiver bring to a conversation that affect the transmitting and receiving of messages between them. Those factors include self-insight into ideas and feelings that one may want to communicate, communication skill level for expressing content and affect, each person’s current mood state during the communication, memories of past attempts to communicate with the partner, and one’s general cognitions and feelings about the partner.

Impact of communicator characteristics and behavior on communication.

Conflict often occurs because messages are not being sent or received effectively by one or both partners. Effective communication involves one person sending clear, constructive messages and the recipient using good listening skills to notice and interpret the intended meaning of the speaker’s messages. Otherwise, the speaker’s intent may not match the impact on the listener.

One characteristic that communicators bring to a discussion is their skill level in delivering messages that are precise and clear. However, a prerequisite to expressing clear messages is the individual’s self-insight for recognizing their thoughts, needs, and

feelings. Thus, some individuals do not express their thoughts and emotions clearly, because they do not monitor their internal states adequately. Furthermore, the individual's ability to send congruent verbal and nonverbal messages is important in determining their messages' impacts on their partner. For example that the content of the phrase "I really love this pie" seems to be a clear expression of positive current emotion and preference. However, if the speaker conveys the content with a particular tone-of-voice or a displeased facial expression, the comment could be understood by the listener as a sarcastic remark.

Kobak and Hazan (1991) have highlighted the importance of partners' regulation of their emotions during conflict, noting that, "As compared with nondistressed counterparts, distressed couples display more dysfunctional negative affect during problem-solving discussions" (p. 861). Consequently, researchers who investigate couple communication typically use coding systems that capture both the content and emotional quality of partners' messages. The current study followed that procedure by assessing both verbal content and nonverbal affect components of couple communication.

Fogel and Garvey (2007) note that co-regulation is a continuous process in which two partners in a close relationship constantly respond to and modify each other's actions. This idea is grounded in the concept that communication is a continuous and dynamic process, rather than the exchange of disconnected information. An example of co-regulation would be the process in which a speaker changes their word choice or tone of voice based on their perception and interpretation of the listener's facial expressions or body language. For example, an individual might arrive at home from work and say, "What a miserable day!" Even if the person's partner had been waiting to tell them about

a promotion they received at their own job, the partner might co-regulate and say, “I am sorry to hear that you had a difficult day. What happened?” Such adjustments are likely to occur on an ongoing basis in a couple’s interactions. Fogel and Garvey (2007) emphasize that communication is a process rather than a simple exchange of facts or single sided positions. Moreover, both partners determine the impact of one person’s statement on the other. The skill of being attuned to and able to respond to the messages that one’s partner has sent is another communicator characteristic that an individual can bring to the couple’s communication process.

Gender differences in communication as an obstacle to co-regulation. Based on her review of research on couple communication, Tannen (1990), notes that males and females differ in their styles of communication and the ways in which they convey messages. Such gender differences may lead to messages not being understood the way they were intended, resulting in confusion and conflict between partners. Tannen (1990) says that men approach the world:

“as an individual in a hierarchical social order in which he was either one-up or one-down. In this world, conversations are negotiations in which people try to achieve and maintain the upper hand if they can, and protect themselves from others; attempts to put them down and push them around. Life, then, is a contest, a struggle to preserve independence and avoid failure,” where women approach the world: “as an individual in a network of connections. In this world, conversations are negotiations for closeness in which people try to seek and give confirmation and support, and to reach consensus. They try to protect themselves from others’ attempts to

push them away. Life, then, is a community, a struggle to preserve intimacy and avoid isolation. Though there are hierarchies in this world too, they are hierarchies more of friendship than of power and accomplishment” (pp. 24-25).

This gendered pattern of interaction is yet another example of contingencies in the couple communication pattern that may lead to negative behaviors, poor communication, and eventually relationship dissolution. Also there are gender patterns in couple communication, one such common pattern found in heterosexual couples being a demand-withdraw pattern. Christensen and Heavey (1990) found that “both husbands and wives were more likely to be demanding when discussing a change they wanted and more likely to be withdrawing when discussing a change their partner wanted. However, men were overall more withdrawn than women, but women were not overall more demanding than men” (p. 73). These patterns interfere with co-regulation, as they commonly result in poor resolution of conflict and in distress (Christensen & Heavey, 1990). In preparing clinicians to deal with the intricate workings of others’ communication, it is important for them to be aware of these empirically supported factors that affect communication, which are potential areas for interventions.

Communicator characteristics as communication filters. Gottman, Notarius, Gonso, and Markman, (1976) suggest that in couple communication there is a complex system in which the speaker and the receiver of a message send and receive it through “filters,” commonly without each party being aware of the subjectivity involved at each end. They state that the speaker has an intention regarding the message that they want to convey, and that the listener tends to assume that message he or she receives reflects what

the speaker intended. Gottman et al. (1976) suggest that good communication occurs when the speaker's intent and the impact on the listener are the same; however, this may not occur for several reasons, one of which is that the intended message must pass through both the speaker's filter and the listener's filter.

A "filter" involves thought processes and emotional responses that influence the information conveyed in a message. For example, one member of a couple may have a positive intent to compliment his or her partner and says, "You look like you have lost weight." Although the content of the message is the statement of the person's perception of a fact regarding the partner's change in appearance, the associated nonverbal cues that the speaker exhibits may be influenced by his or her emotions regarding the topic. Thus, if the speaker had long been frustrated by the partner being overweight, those seemingly objective words "you look like you have lost weight" may be spoken with a voice tone and facial expression that express frustration more than positive feelings. The message was sent through the "filter" of the speaker's attitude and emotions toward the listener. Similarly, if the receiving partner generally views the speaker as an intolerant, critical person, this global view of the partner may act as a filter, coloring the impact of the message. Thus, the listener may interpret the message as really meaning, "You were really heavy before, and I am glad you finally look better now."

Gottman et al. (1976) note that all messages have two components -- the content and the feeling -- and that it is these two aspects interacting and then passing through the filters of both the speaker and the listener that can result in significant gaps between the speaker's intended message and the message that the listener hears. If an individual views

their partner as accepting and loving even if the content is poorly worded, the intent and feeling conveyed can still be positive (Gottman et al., 1976).

Reducing gaps between intended and received messages. One key to reducing discrepancies between intended and received messages in couple relationships is to change the behavior and messages of the sender, repairing deficits in communication such as vague messages or improper use of voice tone. The overall goal is to help the sending partner learn more effective ways of conveying the messages that he or she intends. A fundamental component of effective couple therapy is to aid the partners in gaining awareness of the ways that they communicate with each other (Weeks & Treat, 2001). Parr, Boyle and Tejada (2008) created a communication exercise to enhance better communication for couples, based on Weeks and Treat's (2001) finding that couples often end up in an obstructive pattern of erroneously assuming that their messages are being received the way they were intended. They note that it is helpful for couples to become conscious of the way they are communicating, thus allowing room for change to occur in their ineffective communication pattern and to improve their relationship.

As noted earlier, Gottman (1999) notes that the receiver of a partner's message tends to assume that the understanding he or she has of the message is what the partner intended for him or her to feel, and that the internal assumptions by both partners contribute to a cycle of ineffective communication. Both partners assume that negative messages are consistently intentional. Gottman (1999) notes that having the mindset that messages are intentionally negative in meaning increases the likelihood that partners will interpret their partner's communication efforts as negative, which leads to an atmosphere of distrust and trepidation in the relationship.

Unsettled issues in a relationship, even in the context of the occurrence of positive behavior, might eventually create dissatisfaction in relationships over time (Gottman & Krokoff, 1989; Holmes & Murray, 1996). Consequently, for clinicians working with distressed couples it is vital to assist partners in managing conflict and providing partners with better tools to communicate with each other to promote needed changes in their relationship. Conflict management and skills training could occur on the sender's side to change how messages are conveyed, to make the intent of each message clearer. However, conflict management could also occur on the receiver's part by helping him or her be more aware of the potential filter or bias that he or she brings to the interaction, which also could be altered.

Attachment style as a communicator characteristic. An important communicator characteristic that may affect both the way messages are sent and received is the individual's attachment style. Bowlby (1973) defined attachment styles as "the propensity of human beings to make strong affectional bonds to particular others" (p. 201). According to Bowlby's attachment theory, children, over time, internalize experiences with caretakers in such a way that early attachment relations come to form a concept or "working model" for later adult relationships. Drawing on Bowlby's theory, Bartholomew and Horowitz, (1991) proposed two types of internal *working models* - an internal model of the self (as lovable or not) and an internal model of others (as emotionally available or not). These internal working models include one's view of self and worth, and the view of others as either being trustworthy and available (positive), or as unreliable and rejecting (negative). Bartholomew and Horowitz (1991) note, "each internal model can be dichotomized as positive or negative to yield four theoretical

attachment styles (p. 226). Thus Bartholomew and Horowitz (1991) expanded upon Bowlby's model and developed four distinct styles, which are secure, dismissing, preoccupied, and fearful. Bartholomew and Horowitz (1991) hypothesized, and their data supported, that the two groups theoretically described as having a positive self-model (secure and dismissing) would differ on measures of self-concept from the two groups theoretically described as having a negative self-model (preoccupied and fearful).

“Attachment defines a behavioral system that may or may not be active either in the person's life or in a particular relationship at any given time... Adult attachment provides the potential for relationship security, rather than relationship security per se” (Spertling & Berman, p. 8). Thus, attachment style is a personal characteristic that each member of a couple brings to their relationship and that has potential to influence communication and relationship satisfaction.

Attachment styles and the effects on relationships. Kobak and Hazan (1991) explored the associations of adult attachment styles to specific behavioral interactions in married couples, and their data showed significant correlations between attachment security and marital quality and satisfaction. Insecure attachment was found to be associated with negative couple communication (Kobak & Hazan, 1991). Cohn, Silver, Cowan and Pearson (1992) found that husbands who were securely attached had more positive interactions and less conflict with their wives than their less secure counterparts. However they found no differences in marital interaction for secure and insecure wives. Based on attachment theory, it is assumed that the negative communication is based on insecure individuals' working models about their partner, in which they expect that the partner will be rejecting and interpret each other's negative communication as based on

such rejection. This suggests that individuals' attachment styles can act as potential filters that may influence how they interpret a partner's communication behavior. It is also possible that attachment styles may act as communication filters for the speaker, shaping the content and emotional tone of the messages that are sent. Consequently, Kobak and Hazan (1991) expected that in their study of couple attachment styles and communication "spouses' attachment security would influence their ability to maintain constructive communication during problem solving" (p. 864). Their findings were consistent with that hypothesis, in that wives' greater attachment security was associated with their exhibiting less rejection behavior during problem-solving discussions with their spouses, and husbands with greater attachment security exhibiting less rejection of their wives and more support during the discussions.

Perceived criticism. The extent to which members of close relationships perceive that their significant other is critical of them has been found to have a powerful influence on their psychological well-being. Perceived criticism is one aspect of communication processes that has been labeled and categorized as "expressed emotion," which consists of significant others' emotional over-involvement and negative feelings toward an individual who experiences symptoms of a disorder such as major depression, bipolar disorder, or schizophrenia (Miklowitz, 1995). It is clear from the previous work regarding expressed emotion in relationships that criticism and other negative communication behaviors are detrimental to marital satisfaction and stability, but that subjective perceptions of criticism also influence distress. It appears that researchers and clinicians who focus their work on distressed couples need to address not only actual expressions of criticism in the relationship, but also the partners' perceptions of criticism.

Because perceived criticism is subjective, it is important to identify factors that can influence those negative perceptions. Given the evidence that insecure attachment styles can lead individuals to be sensitive to potential rejection by significant others, it seems important to investigate how partners' attachment security is related to the degree to which they perceive criticism from each other. Specifically, there is limited knowledge about the relative degrees to which perceived criticism is associated with actual negative communication from one's partner versus with one's degree of insecure attachment. To the extent that perceived criticism is predicted by insecure attachment, clinicians can include attention to attachment styles in their interventions for distressed couples. The present study was designed to address this gap in knowledge about "filters" that can contribute to negative impacts of messages between partners and the potential that attachment styles may be one of the filters influencing how positively or negatively people experience their partner's communication. There is a need for investigation regarding filters that effect the perception of communication messages. It is unclear whether an individual's attachment style moderates the relationship between the level of criticism in a speaker's message and the listener's perception of how critical the speaker's message was. The proposed study will address this gap in knowledge.

Purpose

Given the immense impact of various types of communication on couple relationships, it is important to further explore factors that influence partners' negative experiences of their communication process that may ultimately lead to the dissolution of their relationship. Due to the limited existing knowledge about the influence of attachment style on individuals' perceptions of communication from their intimate

partners, the purpose of this study was to test the degree to which an individual's attachment style moderates the association between the conflict behavior expressed by the partner and the amount of criticism that the individual perceives receiving. Thus, this study aimed to identify whether attachment style acts as a filter between conflict behavior and perceived criticism in the couple's communication.

The ultimate goal of this study was to enhance clinician effectiveness in improving the communication of couples experiencing conflict. Because most research and clinical attention has been paid to the actual behaviors enacted by members of a couple, and little attention has been paid to reducing perceptual biases by recipients of messages, this study aimed to increase knowledge in that area. To the extent that perceived criticism is due to actual critical messages from a partner in the conflict behavior exhibited, interventions can focus on altering the partner's behavior, but if perceived criticism is a function of the receiver's insecure attachment, interventions should address those biased internal responses. The purpose of this study was to further understand the interplay of attachment styles (secure, preoccupied, fearful, and dismissing) and communication behavior with the focus being actual communication behavior and perceptions of criticism as partners discuss and attempt to resolve areas of conflict in their relationship. The results have the potential to aid clinicians with their work in guiding couples toward successful management of conflict and better communication patterns. The results help fill a gap in research knowledge by determining how the relationship between actual conflict behavior and perceived criticism is affected by the attachment style of the recipient of messages, providing information that can be used to help couples improve poor communication.

Chapter 2: Literature Review

Introduction to the Literature

This literature review provides an overview of previous research on couple communication, its impact on mental health and relationship satisfaction, factors affecting expression and understanding of messages, attachment styles, and perceived criticism. The aim in this literature review is to link couple communication with health and satisfaction of relationships, and then to identify how attachment styles may serve as filters influencing the relationship between one partner's degree of negative communication and the other's perception of that individual's negativity. The prior research and the findings of this study have implications for interventions to reduce the destructive impact that negative communication can have on individual and relationship functioning.

Negative couple communication behavior. Rehman and Holtzworth-Munroe (2007) found that both global positive and global negative communication were significantly correlated with marital satisfaction scores within each of the three cultural groups (White American couples, Pakistani couples in Pakistan, and immigrant Pakistani couples in America) that they examined. Many theorists have assumed that negative communication is restricted to overt hostility, but others see it as including withdrawal and disengagement, as well as complaining, criticizing, nagging, derogatory statements, name calling, and yelling (Gottman, 1994). Pearce and Halford (2008) note that there are many different negative behaviors that have been found to be associated with deteriorating couple relationships, although the findings vary from one study to another. Markman (1981) concludes that research on negative couple communication indicates

that it is the overall rate of negative talk that leads to deterioration in couple relationships rather than the specific behaviors. This suggests that researchers and clinicians should focus on composite indices of negative communication rather than specific acts. Gottman (1994) states that in the “negative cascades” of destructive communication that he has identified, less severe criticism typically escalates to more severe behaviors such as contempt and stonewalling (withdrawal), and these behaviors are highly predictive of the likelihood that couples who exhibit them will dissolve their relationships. Negative couple communication, including criticism, has been proven to have significant implications for relationship longevity and satisfaction.

Perceived criticism. Perceived criticism can be seen as part of the meaning that a receiver attaches to a sender’s message; i.e., the impacts of messages. Gottman (1994) notes that criticism can become so pervasive within a couple’s relationship that partners become hypersensitive to it and perceive criticism even in the absence of each other’s critical remarks. Perceived criticism has an immense impact on mental health in that the more that individuals diagnosed with a variety of disorders (e.g., depression, schizophrenia) perceive criticism from their family members, the less likely they are to experience improvement from treatments, and the more likely they are to relapse (e.g., Hooley & Teasdale, 1989).

Although general ratings of spousal perceived criticism have been found to predict psychological symptoms (Hooley & Teasdale, 1989) and to be associated with marital discord and relapse from mental disorders (Renshaw, 2008), Peterson and Smith (2010) have noted that most studies of general ratings of perceived criticism do not differentiate types of criticism. Renshaw (2006) found that perceived criticism included

destructive but not constructive forms of criticism. Destructive criticism can be understood as an expression of disapproval based on the assessment of someone's character, whereas constructive criticism would be a suggestion for change that involves no negative evaluation. In the study by Peterson and Smith (2010), 118 couples recruited from the community and an outpatient community mental health center who varied broadly in psychological symptoms and marital distress watched videotapes of their own couple discussions of changes that the partners desired in each other. The partners independently rated their own messages in terms of the degree of criticism that they intended. They also rated the other's messages in terms of general levels of criticism, as well as, more specifically, both constructive and destructive forms of criticism. Peterson and Smith (2010) defined constructive criticism as "intervals in which positively valenced criticism occurred," and destructive criticism as "intervals containing negatively valenced criticism" (p. 98). Outside judges also rated partners' levels of criticism. The study's results suggest that destructive rather than constructive criticism is related to individuals' general ratings of their partner's perceived criticism. Peterson and Smith (2010) conclude that because general perceived criticism ratings primarily reflect destructive criticism from another person, this may explain their utility in predicting individuals' relapse from psychological disorders. Peterson and Smith (2010) suggest that future research differentiate between constructive and destructive forms of criticism.

Although the present study's measure fails to differentiate between constructive and destructive criticism, the study focuses on the effect that insecure attachment has on the perceived level of criticism in couple interactions regardless of positive or negative intent. The prior research conducted by Renshaw (2006) and Peterson and Smith (2010)

suggests that couples are responding primarily to expressions of destructive criticism rather than to instances of constructive criticism; future studies will be needed to clarify that point.

Sometimes perceived criticism may reflect the actual negative behavior that individuals receive from their significant others, however, the perceived criticism may also be based on the receiver's perceptual biases. Thus, Hooley and Teasdale (1989) suggest that when individuals who report high levels of perceived criticism actually live in highly critical home environments, interventions can target reducing the negative behavior of the family members. However, for those who perceive high levels of criticism from significant others who actually are minimally critical, a form of cognitive therapy might be appropriate to reduce their negative perceptions. Hooley and Teasdale note that the behavior perceived may be related to what is actually occurring or it may be a result of distorted perceptions on the recipients part due to past relationship issues.

As noted previously, perceived criticism from significant others has been found to have negative effects on individuals' psychological functioning. It also seems likely that the more a person views a partner as critical the more he or she will experience emotional distress in the relationship, and the more he or she may behave negatively toward the partner (e.g., withdraw or engage in retaliatory criticism). Hooley and Teasdale (1989) found that depressed individuals who rated their partner as significantly more critical tended to relapse more than those who perceive low levels of criticism from their partners. This demonstrated the concurrent validity of Hooley and Teasdale's perceived criticism measure in the sample of depressed patients and their spouses. Peterson and Smith (2010) note that therapists should aim to determine what members of a couple

perceive as critical comments, as two partners may perceive them differently. Differences in perceptions of criticism may be due to some other factor influencing perceptions, such as attachment styles acting as filters in communication.

Attachment styles and their potential as filters for communication. As noted previously, Bowlby's (1969, 1973) attachment theory proposed that all individuals are born with an innate need for a bond with others beginning with infancy. Based on the childhood experiences with one's caregiver, the individual develops a style of attachment and a cognitive "working model" of how they view self (as either worthy or unworthy of others attention) and others (as either available or not), which shape their relationships with others. In attachment theory, the impact of the experiences that an individual has with caretakers beginning very early in life shapes the style of attachment that is developed. Subsequently, an individual's attachment style tends to influence how he or she responds to interactions in relationships with significant others and affects the way that he or she approaches and understands the world and relationships. Bowlby (1973) explains the role of internal working models in the intergenerational transmission of attachment patterns, stating that individuals who grow up to become fairly stable and self-reliant normally have parents who are supportive but who also permit and encourage autonomy. He says that these parents tend not only to engage in fairly open communication of their own working models of self, of their child, and of others, but also indicate to the child that these working models are open to questioning and revision. Hazan and Shaver (1987) suggest that insecure adult attachment occurs due to early relationship experiences that are negative in nature and that this attachment style is indicated by a tendency to feel anxious about, or avoid, emotional closeness in intimate

relationships. Hazan and Shaver (1987) state that secure adult attachment is a tendency to be confident in relationships, low in both attachment-related anxiety and avoidance, comfortable with intimacy, willing to rely on others for support, and confident that one is loved and valued by others.

Researchers who have investigated the role of attachment styles in close relationships have focused on correlates of attachment insecurity such as anxiously attached people's negative models of self (e.g., believing they are unlovable; Bartholomew & Horowitz, 1991), low self-esteem (Griffin & Bartholomew, 1994), self-criticism (Murphy & Bates, 1997), and dysfunctional attributions about partners' behavior that increase the likelihood of jealousy and separation anxiety (Collins, 1996). In contrast, people who have avoidance-oriented attachment styles are generally less invested in relationships, less upset when they end, and relatively low in commitment and relationship satisfaction (Mikulincer & Shaver, 2003). In comparison, individuals who tend to have secure attachment enjoy close bonds but do not find themselves lost in their relationships. For instance Kobak and Hazan (1991) found that "spouses with secure working models (self as relying on partner and partner as psychologically available) showed more constructive modulation of emotion and reported better marital adjustment" (p. 861). Thus, there is good reason to expect that an individual's existing attachment style will affect how he or she perceives a partner's behavior toward him or her during a discussion of a topic that is a source of conflict in the relationship. There is limited knowledge about the degree to which individuals' attachment styles influence (and potentially bias) their perceptions of each other's communication behavior.

Bartholomew and Horowitz (1991) also hypothesized that the two groups

theoretically described as having a positive model of others (secure and preoccupied) would differ on a measure of sociability from the two groups described as having a negative model of others (dismissing and fearful), which they found to be supported in their research. Therefore, each of the attachment styles would involve either a positive or negative working model of self and others. Bartholomew and Horowitz (1991) explain that those who are securely attached view the self as worthy of love and others as available (a positive working model of self and others). They explain that those who have a preoccupied attachment view the self as unworthy of love and others as positive, and they have an intense desire for others to provide that affirmation (a negative working model of self and a positive working model of others). Those who have a dismissing style of attachment view the self as positive and others as negative, and they tend to dismiss the importance of close relationships (a positive working model of self and a negative working model of others). Finally Bartholomew and Horowitz (1991) describe those who are fearfully attached as viewing the self as negative and unworthy, and others as negative, and they are likely to reject others (a negative working model of self and others).

Kobak and Hazan (1991) state that “open communication between partners provides individuals with information about self and other that allows working models to become more finely attuned” (p. 862). They are referring to the cognitive aspect of attachment styles, in which individuals have developed internalized general views or schemas over time regarding their own characteristics and those of an intimate partner. Kobak and Hazan (1991) propose that healthy communication in a relationship involves the flow of information to support more positive and accurate views of self and others. In

turn, they suggest that an individual's present level of attachment security influences his or her communication with a significant other and willingness to change his or her working model. In contrast, an individual with an insecure working model does not expect significant others to be emotionally available; rather, he or she perceives a high likelihood of being ignored, rejected, or abandoned, and this view influences how the individual behaves toward others. Thus, attachment theory proposes that one's attachment style affects (and biases) the way that one perceives a significant other and communicates with the significant other.

Butner, Diamond, and Hicks (2007) findings suggest that individuals differ in their ability to regulate their emotions during interactions with their intimate partners, and those differences may be due to their attachment styles. They note that attachment styles have been assumed to involve stable expectations about self and others. As noted by Bowlby (1973), once an individual's working models are formed they serve as a heuristic for how to behave when one's attachment system is stimulated by current situations in one's relationships with significant others. For example, whenever one's basic needs (e.g., for nurturance) are stimulated, one's attachment working model is evoked, and one behaves accordingly toward one's current attachment figure. Thus, an individual with an anxious attachment will view a partner as emotionally unavailable, experience anxiety associated with an expectancy of being alone, and may cling to the partner. In other words, based on their relatively stable attachment styles, people are primed to perceive others' behaviors in particular ways and to respond to others in particular ways based on those perceptions. The present study investigated whether attachment styles act as a filter and affect how much criticism people perceive from their partner.

For purposes of this study Bartholomew and Horowitz's (1991) classification of attachment styles will be used. They expanded on Bowlby's (1969, 1973) model of three different parent-child attachment styles to include the four styles of partner attachment -- secure, preoccupied, fearful, and dismissing. Bartholomew and Horowitz (1991) based their classification on Bowlby's concept of working models of self and others, which each can be dichotomized into positive or negative versions, yielding four separate forms of attachment. Bartholomew and Horowitz (1991) went on to empirically validate their four-style classification in several studies. The assessment tool for the present study was developed using that four-style classification of attachment styles.

Regarding a possible link between attachment style and perceived criticism from a partner, since Hazan and Shaver (1987) suggest that secure attachment leads to positive and comfortable relationships marked by intimacy and a sense of confidence in their value, it seems likely that individuals who fall into this category may be able to deflect, reduce, or integrate their partner's criticism. In contrast, insecure individuals' working models are likely to lead them to interpret a partner's negative communication and criticism as due to rejection. Therefore, those who have fearful and preoccupied attachment to their partner may be sensitive to their partner's criticism, because they are wary of potential rejection in close relationships. However, it is not clear how those who have a dismissing style of attachment may react to a partner's criticism, because their typical way of coping with their insecurity is to minimize or dismiss the importance of close relationships in their lives.

Theoretically, anxious and avoidant forms of insecure attachment should be linked to negative forms of couple communication. Because anxiously attached persons are

preoccupied with rejection and fearful of disapproval, they may pursue and cling to attachment figures, seeking approval and nurturance, and are likely to be sensitive and overreact to any suggestions of criticism or rejection (Feeny & Noller, 1996). In contrast, those with avoidant attachment are likely to use distancing forms of verbal and nonverbal communication to protect themselves from experiencing the distress of being vulnerable to others.

Pearce and Halford (2008) conducted a study in which a sample of 59 married and cohabiting couples completed self-report measures of attachment, attributions, and communication. The couples also were videotaped participating in two 10-min problem-solving discussions and were assessed on their attributions during the discussions using video-mediated recall. Pearce and Halford tested whether an individual's attributions about causes of their partner's negative behavior mediate the relationship between insecure attachment and negative couple communication. Pearce and Halford (2008) explained their reasoning in this way:

A person describes to his or her partner a recent action and the partner responds, "Oh, is that what you did?" Anxiously attached individuals are likely to attend to, and perceive, the partner's response and criticism because they are vigilant to possible disapproval. In receiving the response as critical, the anxiously attached individual is likely to make negative attributions about his or her partner's perceived criticism, such as "she always sees me as doing the wrong thing, she is so unfair." The combination of perceived criticism and negative attributions leads the anxiously attached individual to communicate negatively, which might involve either withdrawal from the partner or hostile communication with the

partner. (p. 157)

Pearce and Halford (2008) found that securely attached people did not perceive their partner's statement as negative or critical but rather as neutral or even positive, and their benign attributions about the partner's motives led to positive communication toward the partner.

Gender and attachment styles. In the initial research on romantic attachment styles, such as that by Hazan and Shaver (1987), it was believed that men and women were as likely to have an insecure or secure attachment style, similar to the findings regarding attachment in children. However, succeeding research on adult romantic attachment utilizing the four-category model of attachment (Bartholomew & Horowitz, 1991) usually found that men were significantly more dismissing than women (Brennan, Clark, & Shaver, 1998; Scharfe & Bartholomew, 1994). Kobak and Hazan (1991) found that "husbands described themselves as relying less on their wives than wives described themselves as relying on their husbands" (p. 864). The differences for men and women's dismissing romantic attachment corresponds with general societal beliefs about emotional differences between the sexes, where men are viewed as emotionally restricted, exhibiting less nurturance, and unable to connect with others (Bem, 1993; Spence & Helmreich, 1978). Men's greater likeliness to be dismissive is in line with their responses on self-report surveys of emotional distance and social restrictiveness.

Although it has been found that men report more dismissive attachment than women do, Kobak and Hazan (1991) also found that when "wives displayed more rejection and less support during problem solving, husbands were less secure, describing their wives as psychologically unavailable" (p. 865). This suggests that men's dismissive

styles likely represent a mode of coping with underlying insecurity (consistent with attachment theory) rather than indicating that men have little need for intimate connection with their partners.

Gap in the Literature

Based on the literature reviewed, it is clear that there is little known about the relationship between individuals' attachment styles and the degree to which they perceive criticism from their intimate partner. Because there is little known about how attachment style in general as well as how each of the four styles (fearful, preoccupied, dismissing and secure attachment) may act as a filter through which people view and understand communication, this study aims to fill that void by determining if a receiver's attachment affects the amount of negative (critical) messages he or she perceives from the partner.

Because different attachment styles can affect couple communication differently depending on the associated attributions, it is important to determine whether each attachment style is associated with partners' cognitions about their couple interactions including what is perceived. In particular, this study will focus on perceived criticism as a key type of cognition that has been demonstrated to affect individuals' well being. Specifically, the study will examine the relative degrees to which the criticism that an individual perceives receiving from his or her partner is associated with the actual conflict behavior expressed by the partner during a discussion and how much it is associated with the individual's own secure or insecure attachment style (i.e., main effects of partner's conflict behavior and the moderating or filtering effect of the receiver's secure, preoccupied, fearful or dismissing attachment on perceived criticism). Furthermore, to what extent does the individual's degree of insecure (preoccupied,

fearful, and dismissing) attachment moderate the relation between criticism from a partner and the individual's perception of criticism from the partner. If a person's perception of their partner's communication is based more on their own characteristics than on the partner's communication behavior, this could have implications for clinicians working to improve couple communication, guiding clinicians to focus not only on communication skills but also on partners' interpersonal sensitivities that influence the impact of messages that are expressed.

Theoretical Base for the Study

The theoretical background for the present study is that of cognitive-behavioral theory as applied to intimate relationships. Epstein and Baucom (2002) have developed a model of cognitive-behavioral therapy that conceptualizes intimate partner relationships within a cognitive-behavioral framework. Overall, cognitive-behavioral theory focuses on the behavioral, cognitive, and emotional realms of human functioning. The model has its roots in social learning theory and cognitive psychology's focus on information processing, schemas, etc. (Epstein & Baucom, 2002). When applied to couple relationships, the cognitive-behavioral model examines circular, mutual influences between two partners' behaviors, cognitions, and emotional responses, and the influences of these on the partners' levels of relationship satisfaction (Baucom & Epstein, 1990). The cognitive-behavioral model developed by Epstein and Baucom (2002) incorporates the characteristics of the couple's relationship, the two individuals, and the couple's external social and physical environment.

Whereas earlier applications of social learning theory to couple relationships (e.g., Jacobson & Margolin, 1979) focused on behavioral interactions between partners, the

model has been expanded considerably to incorporate important cognitive and emotional factors. Epstein and Baucom (2002) note that there are several types of cognitions that affect the quality of couple relationships, including selective perception, attributions, expectancies, assumptions, and standards. For example, selective perception refers to the common process in which an individual notices some aspects of the information that is available in a situation and overlooks other aspects. Selective perception can occur for a variety of reasons, such as an individual's preconceived concept of what will occur in a situation. This model of selective (and potentially biased) perception seems to be a good framework for the present study, in that perceived criticism is an individual's subjective perception of their partner's behavior.

The cognitive-behavioral model also is relevant for understanding the behavioral processes that occur in couple communication. Epstein and Baucom (2002) note that "cognitive behavioral approaches to intimate relationships have always stressed the importance of behaviors in understanding distress and satisfaction" (p. 61). They note further that negative communication behaviors can be used to distinguish couples that are distressed from those who are not. Epstein and Baucom (2002) also suggest that "partners engage in negative behavior because they are unaware of the impact of their behavior; they hope to promote behavior change" (p. 62). These principles of cognitive-behavioral theory are important to consider in thinking about the intentions behind negative communication behaviors and their ultimate effects on the partners' satisfaction and the relationship's longevity. Thus the theory readily addresses partners' cognitions about each other's intent, partners' perceptions as well as the actual behaviors that each person exhibits, and the overall impact of behaviors on the quality of the relationship.

Attachment is also covered within cognitive-behavioral theory, as a form of emotionally laden cognitive schemas that individuals develop beginning at birth regarding close relationships. Attachment style is originated and created in an individual through the presence or absence of emotional connection, nurturance, and the satisfying of needs; it is maintained through the thought process, and the reorganization of meaning and experiences over time (Bowlby, 1969). The cognitive-behavioral model includes the cognitive component of an attachment style (the working model that the individual has regarding the self and caretakers), the emotional component (emotions such as anxiety regarding the potential that one's significant other will abandon oneself), and the behavioral component (e.g., learned clinging or reassurance-seeking behavior). These aspects of cognitive-behavioral theory provide a basis for the present study's hypotheses regarding relationships among conflict behavior, attachment styles, and perceived criticism.

Definitions of Variables

This study includes the variables of actual conflict behavior found during couple communication; secure, preoccupied, fearful, and dismissing attachment; perceived criticism; and gender. The following are definitions of these variables.

Independent Variables

Gender. In this study gender differences in the relationships of conflict behavior and attachment styles with perceived criticism were explored. Gender is the identified sex as either male or female.

Actual conflict behavior (criticism). Conflict behavior in communication is a construct generally recognized as the observable amount of negative, comments and

affect directed from one individual to another during an interaction. Conflict behavior as measured by the Marital Interaction Coding System-Global (MICS-G, Weiss & Tolman, 1990) includes the code categories of complain, criticize, negative mindreading, put downs/insults, and negative command, as well as the affect cues of hostility, sarcastic voice, whining voice tone, angry voice tone, and bitter voice tone. The focus of this study is on how the range of conflict behaviors enacted by one member of a couple are perceived as criticism by the other member.

Moderator Variables

Attachment styles. Attachment is a construct generally recognized as the bond, or connection between two people. Attachment styles are thought to develop through an individual's belief in their being worthy of love and affection and the extent to which a significant other is emotionally available. Based on an adaptation of Bowlby's (1973) theory regarding working models of attachment, Bartholomew and Horowitz (1991) proposed that there are four attachment styles (secure, dismissing, preoccupied, and fearful) measured by the Relationship Questionnaire (RQ). The four attachment styles that are believed to be found in romantic relationships were adapted from the styles typically known as secure, anxious/ambivalent, and avoidant that Bowlby (1969, 1973) and others found to be present for children and their caregivers. Bartholomew and Horowitz (1991) expanded the avoidant style to translate into the two styles of dismissing and fearful attachments, whereas the original anxious/ ambivalent style relates to the preoccupied style.

Secure attachment. An individual with a secure style of attachment is comfortable with intimacy and autonomy; they desire to be emotionally close to others,

and value interdependence between themselves and others and do not worry about being alone or not being loved. These people often demonstrate good judgment in handling relationship issues (Bartholomew & Horowitz, 1991).

Fearful attachment. An individual with a fearful style of attachment tends to avoid intimate relationships, has a fear of rejection and anticipates the rejection, so he or she tends to distrust others, aims to protect the self against vulnerability and generally approaches the world from an insecure standpoint (Bartholomew & Horowitz, 1991).

Preoccupied attachment. An individual with a preoccupied style of attachment demonstrates excessive attention to and need for intimate relationships, has a need for the acceptance from others to determine his or her own self-worth, exhibits incoherence and exaggerated emotionality in discussing relationships (Bartholomew & Horowitz, 1991).

Dismissing attachment. An individual with a dismissing style of attachment dismisses intimacy and close relationships and value independence highly, has restricted emotionality, and avoids depending on others and having others depend on them (Bartholomew & Horowitz, 1991).

Dependent Variable

Perceived criticism. Perceived criticism is the amount of criticism that a person experiences or perceives in what another person does or says to them, and about them. Peterson and Smith (2010) suggest, “critical comments were those expressing dislike, disapproval, or resentment of the spouse’s personality or behavior” (p. 98). Perceived criticism as conceptualized by Hooley and Teasdale (1989) is a self reported perception of the amount of criticism displayed by the person’s partner during a particular couple interaction.

Hypotheses

Based on the prior research that was reviewed, it was expected that the degree of actual conflict behavior exhibited by one member of a couple would be associated with the other member's degree of perceived criticism. In addition, it was expected that a partner's sensitivity to the other partner's critical comments would be predicted by their own attachment style. The higher the level of an individual's secure attachment, the less criticism the individual would perceive that the partner was expressing toward him or her during their discussion of a conflict topic concerning the relationship. Furthermore, it was expected that more secure attachment would moderate the relationship between actual conflict behavior from a partner and the recipient's level of perceived criticism.

Hypothesis 1: There is a positive association between one partner's conflict behavior and the other's perceived criticism.

Hypothesis 2: The more securely attached a person is, the less criticism the individual will perceive from their partner.

Hypothesis 3: The more an individual has a fearful attachment style, the more criticism the individual will perceive from their partner.

Hypothesis 4: The more an individual has a preoccupied attachment style, the more criticism the individual will perceive from their partner.

Hypothesis 5: The more an individual has a dismissive attachment style, the less criticism the individual will perceive from their partner.

Hypothesis 6: Secure attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of secure attachment the association

between actual and perceived criticism will be lower than when the receiver has a lower level of secure attachment.

Hypothesis 7: Fearful attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of fearful insecure attachment the association between actual and perceived criticism will be higher than when the receiver has a lower level of fearful insecure attachment.

Hypothesis 8: Preoccupied attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of preoccupied insecure attachment the association between actual and perceived criticism will be higher than when the receiver has a lower level of preoccupied insecure attachment.

Hypothesis 9: Dismissing attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of dismissing insecure attachment the association between actual and perceived criticism will be lower than when the receiver has a lower level of dismissing insecure attachment.

The above hypothesized relationships among the variables were suggested based on research that shows positive effects of secure attachment on couple relationships and communication, as summarized in the literature review of this study. It was proposed that when there is conflict behavior there will be perceived criticism. However, it was also hypothesized that attachment style moderates the relation between one person's actual conflict behavior and the criticism that their partner perceived, such that one's attachment

style acts as a filter for perceiving messages. Pistole and Arricale (2003) studied the attachment types and found that those engaged in a romantic relationship who reported a secure attachment style on a self-report questionnaire also reported less “fighting” and more effective arguing than those who reported being fearfully attached. They also noted that those who are securely attached experience less “threat” during arguments than those who are preoccupied or fearfully attached. Based on the fact that they found that attachment style does relate to how individuals with different styles experience arguments, attachment styles similarly could affect how much criticism is perceived in a conversation. Therefore, if a person is securely attached to his or her partner, he or she would be inclined to attribute the partner’s statements to constructive intent rather than critical evaluations of them, regardless of whether the statement was actually phrased with a critical connotation. The partners who are more securely attached would recognize the appropriate level of criticism present in a discussion, whereas an individual with a preoccupied or fearful form of insecure attachment would be more sensitive to their partner’s statements as they rely on the reaction of their partner to determine their self-worth. Those who are fearfully attached may also respond similarly to those who are preoccupied as they are fearful of being hurt and therefore may be hypersensitive to their partner’s comments.

Partners who have a dismissing style of attachment would also underestimate the critical comments as a way to disengage from the attachment of their partner either because they are fearful of being hurt or abandoned or because they value their independence over the connection with others. Those who are dismissing fail to find the importance in intimate relationships and therefore may tend not to notice the critical

comments, or the criticism fuels their rationale for and desire to abstain from close relationships. Individuals with secure and dismissing styles may appear to be similar in their perception of the amount of critical comments but for different reasons.

Research Question

Gender difference. Post hoc analyses were conducted to determine whether there was a gender difference in (a) the relationship between actual and perceived criticism, (b) the relationships of secure and insecure attachment styles with perceived criticism, and (c) the roles of secure and insecure attachment styles as moderators of the relationship between actual and perceived criticism.

Chapter 3: Method

Sample

The present study involved a secondary analysis of data obtained at the Center for Healthy Families (CHF) clinic located at The University of Maryland, College Park campus. The CHF is a training clinic for an American Association for Marriage and Family Therapy (AAMFT) accredited Couple and Family Therapy program; the therapists are graduate students, and the supervisors are licensed clinicians who are full-time and adjunct faculty members. The sample consists of couples that live in the greater Washington, DC metropolitan area, in particular Prince George's County, Maryland where the University is located. The clinic population of couples vary in age, race, and ethnicity. The sample includes couples that are married, engaged, dating and/or cohabitating; and they must report themselves as committed to working on their relationship.

The data used in the present study primarily were collected originally for an ongoing study in the CHF that is evaluating alternative forms of couple therapy for mild to moderate physical aggression and psychological aggression. The exclusion factors for the Couples Abuse Prevention Program (CAPP) study, were maintained for the present study, they were: 1) those clients who are seen for individual therapy and are not attending with their partner, 2) couples coming in to be seen as part of a family, 3) homosexual couples, and 4) those who did not consider themselves as in a relationship (e.g., divorced parents coming to therapy to work on co-parenting skills). Because the study aimed to look at couples' interactions, clients seen individually would not be appropriate. Similarly, couples that attend with their other family members were not

included because the focus of the treatment they were seeking may not have been their couple relationship, and those couples were not required to complete a communication sample. Also, couples who came to therapy for help with issues other than their relationship were not included because the interactions of couples who are divorced or separated may be different from those who consider themselves as committed to working on the relationship; in addition, they did not complete a communication sample. Finally, same-sex couples were not included because only a small number seek couple therapy at the CHF, resulting in too small a sample for statistical analyses. All of these categories of clients did receive treatment at the Center for Healthy Families, but their assessment data were excluded from this study.

Couples who come to the Center for Healthy Families initiate contact with the CHF to address a variety of relationship issues and are not solicited for therapy, or for specific research studies at this clinic. The vast majority of the sample for the present study were couples that chose to participate in the original CAPP study, as well as some couples who did not take part in the CAPP study for their therapy sessions but did complete the measures used in this study. All written assessment materials at the CHF are assigned code numbers and are kept confidential through storage in locked files in the clinic. Participants' scores on the measures are entered into a database in the CHF that includes no identifying information, and it is that de-identified database that was used for the present study.

It should be noted that during the initial years of data collection in the CHF, communication samples were only obtained from couples who met criteria for inclusion in the ongoing CAPP treatment outcome study at the clinic. The inclusion criteria for the

CAPP study were instances within the past four months of psychological abuse reported on the Multi-dimensional Emotional Abuse Scale (MDEAS; Murphy, Hoover, 2001), and mild to moderate physical abuse reported on the Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) but no instances of injury that required medical attention, no use of weapons, no untreated substance abuse, and no reported fear on either person's part of living together or being in couple therapy with their partner. However, the clinic subsequently began to collect a communication sample from all couples that sought therapy at the CHF. Consequently, the sample for this study is weighted toward couples who reported some level of abusive behavior and chose to be included in the CAPP study; however this study also included couples who either did not report these behaviors or those who chose not to participate in the CAPP research study. This sample of 95 couples included 34 couples that were identified as participating in the CAPP study. Overall, the entire sample does not include couples that experienced severe physical aggression, as such cases are excluded from couple therapy as a standard policy of the CHF.

The basic requirement for inclusion in this study was that the couples that completed the necessary self-report measures and a ten-minute communication sample as part of the standard assessment process prior to beginning therapy at the CHF. The sample for this study includes all heterosexual couples who came to the CHF seeking treatment from 2000 to 2008 who completed the measures examined in this study, which are the 10-minute communication sample that is coded for types of positive and negative communication with the Marital Interaction Coding System-Global (MICS-G; Weiss & Tolman, 1990), the Relationship Issues Survey (RIS; Epstein & Werlinich, 1999)

assessing degree of couple conflict in 28 areas of their relationship, the Relationship Questionnaire (RQ; Batholomew & Horowitz, 1991) assessing attachment styles, the Hooley and Teasdale Scale (H&T Scale; Hooley & Teasdale, 1989) assessing perceived criticism and the Couple Information and Instructions questionnaire that was developed at the CHF to collect basic demographic information and clients' descriptions of their presenting problems. Descriptions of these measures are found in the Measures section below, and copies are included in the Measures Appendix.

The sample analyzed in the present study is comprised of 95 couples. It is similar in characteristics to the overall population that seeks treatment at the CHF. Some demographic data were missing for some of the participants, so the n is lower than 95 on some variables. The mean ages for the female ($n = 88$) and male ($n = 87$) participants were 30.92 ($SD = 9.10$) and 32.77 ($SD = 9.48$), respectively. The men reported a mean number of 7.01 years together with their partner ($SD = 7.27$) whereas women reported a mean number of 7.23 years together ($SD = 7.41$). Men ($n = 83$) men reported a mean personal yearly gross income of \$38,606 ($SD = 32,424$), whereas women ($n = 84$) women reported a mean personal yearly gross income of \$23,486 ($SD = 19,647$). See Tables 1-6 for the distributions of the men and women's current employment statuses, races and education levels.

Table 1: *Men's Current Employment Status*

	Frequency	Percent
Employed Full Time	63	66.3
Employed Part Time	11	11.6
Student	3	3.2
Disabled, Unemployed	1	1.1
Unemployed	8	8.4
Retired	1	1.1
Missing	8	8.4
Total	95	100.0

Table 2: *Women's Current Employment Status*

	Frequency	Percent
Employed Full Time	45	47.4
Employed Part Time	17	17.9
Homemaker, not employed outside home	12	12.6
Student	10	10.5
Unemployed	3	3.2
Retired	1	1.1
Missing	7	7.4
Total	95	100.0

Table 3: *Men's Race*

	Frequency	Percent
Narrative American	3	3.2
African American	28	29.5
Asian/Pacific Islander	2	2.1
Hispanic	8	8.4
White	43	45.3
Other	3	3.2
Missing	8	8.4
Total	95	100.0

Table 4: *Women's Race*

	Frequency	Percent
African American	35	36.8
Asian/ Pacific Islander	2	2.1
Hispanic	9	9.5
White	38	40.0
Other	3	3.2
Missing	8	8.4
Total	95	100.0

Table 5: Men's Highest Level of Education

	Frequency	Percent
Some High School	4	4.2
High School Diploma	20	21.1
Some College	24	25.3
Associate Degree	7	7.4
Bachelors Degree	8	8.4
Some Graduate Education	7	7.4
Masters Degree	12	12.6
Doctoral Degree	3	3.2
Trade School	2	2.1
Missing	8	8.4
Total	95	100.0

Table 6: Women's Highest Level of Education

	Frequency	Percent
Some High School	4	4.2
High School Diploma	8	8.4
Some College	29	30.5
Associate Degree	9	9.5
Bachelors Degree	9	9.5
Some Graduate Education	11	11.6
Masters Degree	12	12.6
Doctoral Degree	1	1.1
Trade School	5	5.3
Missing	7	7.4
Total	95	100.0

Procedure

The current study involved a secondary analysis of data previously collected at the Center for Healthy Families (CHF), including couple data from the Couples Abuse Prevention Program (CAPP) treatment outcome study as well as data from some couples who were not involved in that study. All couples, families, and individuals who come to the center are given an informed consent form detailing the confidentiality practices and the exclusion to those practices including the fact that therapists are mandated reporters for an admission of potential, on going or past child abuse (whether the abuser is deceased or living,) and that confidentiality is only broken in cases of imminent physical injury, homicide, or suicide. The current study relies on the information in the larger CHF database that includes couples with the following criteria: 1) both partners are 18 or older, 2) both partners feel safe living and participating in therapy with each other, and 3) neither partner has an untreated alcohol or substance abuse problem. The original CAPP study included intimate partner relationships in which psychological abuse and mild to moderate physical abuse were present. However, for this study all heterosexual couples who completed the self-report measures and a ten-minute communication sample as part of the two-day CHF couple assessment process, regardless of the level of abuse or inclusion in the CAPP study or not (either by choice, or due to insignificant levels or severe levels of abuse), were included.

Various therapists at the CHF from the year 2000 to 2008 previously collected the data, including the ten-minute communication sample and self-report questionnaires. The self-report questionnaires include a set of measures administered on the first and second visits to the Center for Healthy Families. The first and second days of assessments

include a larger set of questionnaires than those included in this study. The therapists assigned to the couples' cases administered the questionnaires and the communication sample prior to the beginning of treatment. Those couples who qualify for the CAPP study and choose to participate fill out more questionnaires over the course of the days of assessment than those who do not; however, all of the couples in this study, whether in the CAPP study or not, must have completed the same set of measures to be used in this study.

Measures

This study included the measures listed in Table 7 to assess conflict behavior including criticism during couple communication, the four styles of attachment, and perceived criticism.

Table 7: *Variables and Measures Used to Assess Them*

VARIABLE	MEASURE
Conflict Behavior	MICS-G Coding Scheme; Rating of the Global Area: Conflict (complain, criticize, negative mindreading, put downs/insults, and negative command; and the affect cues: hostility, sarcastic voice, whining voice tone, angry voice tone, and bitter voice tone)
Perceived Criticism	H&T Scale; Item number 1
Secure Attachment (A)	Relationship Questionnaire (RQ); Item 2a
Fearful Attachment (B)	RQ; Item 2b
Preoccupied Attachment (C)	RQ; Item 2c
Dismissing Attachment (D)	RQ; Item 2d
Gender	Self- Identified Sex on the Couple Information and Instructions Questionnaire

Actual conflict behavior (criticism). For purposes of this study the operational definition of “conflict behavior” was recognized as the observable amount of negative comments and negative affect directed from one individual to another during an interaction as assessed by the Marital Interaction Coding System-Global coding system (MICS-G; Weiss & Tolman, 1990).

This variable was measured by the scores coded using the MICS-G based on the couple’s interactions during the ten-minute communication sample conducted on the second day of assessments. The MICS-G, based on the micro-analytic Marital Interaction Coding System (MICS) by Weiss and Summers (1983) was created to save researchers time and money by making costs lower due to the shorter time required for training, since the coding system involves global ratings rather than act-by-act categorization of each partner’s speaking turns. Weiss and Tolman (1990) found that the MICS-G was a superior rating scale to the MICS in the identification of partners’ behaviors, and in identifying distressed and non-distressed couples. The couples prior to their study were separated into distressed and non-distressed groups. The distressed couples were determined as those with a “mean couple score below 100 on either the Marital Adjustment Test (MAT: Locke & Wallace, 1959) or on the Dyadic Adjustment Scale (DAS: Spanier, 1976)” (Weiss & Tolman, 1990, p. 274). The raters were able to accurately assess which couples were distressed and which ones were not, based on their global levels of the positive and negative forms of communication, except for the problem solving form of communication that failed to discriminate the groups.

In the present study, the topic for each couple’s ten-minute communication sample was determined by their therapists, based on the partners’ ratings of how much

conflict occurs between them in each of the 28 areas of their relationship (e.g., honesty, relationships with friends, finances and household tasks and management) assessed by the Relationship Issues Survey (RIS, Epstein & Werlinich, 1999). The RIS presents 28 topics that partners often identify as issues for which conflict arises between them; the survey asks each member of a couple to rate, on a scale of 0-3, how much that area is presently a source of disagreement or conflict in their relationship. The couple's therapists selected a topic that the partners had indicated was a source of either slight (coded as 1) or moderate (coded as 2) disagreement or conflict for them. The couple was then placed in a therapy room, where they were instructed to discuss the selected issue for ten minutes and attempt to resolve it as they would if they were at home. The ten-minute discussion was videotaped for later coding.

Undergraduate student research assistants were trained for one full semester in the use of the MICS-G to code the six types of behavior (conflict, problem solving, validation, invalidation, facilitation and withdrawal) by each partner. During the training semester the research assistants coded sample tapes and worked toward becoming reliable in their assessment and scoring. The undergraduate research assistants view the ten-minute communication samples and chunk them into five two-minute sections to be coded. Watching the taped interaction, the coders observe each partner's behavior and rate on a scale from 0-5 (none, very low, low, moderate, high, or very high) the levels of conflict, problem solving, validation, invalidation, facilitation, and withdraw behaviors by each partner separately during each two-minute interval. To achieve inter-rater reliability, raters' scores must fall within one point of each other. The coders spend an hour and a half each week discussing and negotiating the scores that they assigned, in

order to come to a consensus about what they observed in the videos. During the second semester, after the coders have become reliable, they begin coding the new data for insertion into the database.

The MICS-G coding system was used to code the data because it is a global version of the widely used micro-analytic MICS coding system, intended to be easier to use than the MICS. For this study the aspect of the MICS-G that was used to measure actual criticism was the global area of conflict, which asks the coders were instructed to look for critical messages. Under the global heading of conflict are the areas of complain, criticize, negative mindreading, put downs/insults, and negative command. There are also affect cues that fall under this global heading of conflict; those cues are hostility, which includes obscene or threatening gestures, shouting, sarcastic voice directed at partner, whining voice tone, angry voice tone, and bitter voice tone (Weiss & Tolman, 1990). The focus of this study is negative communication directed from one member of a couple to the other, displayed as aspects of conflict behavior. One of the common components of conflict behavior is criticism, which consists of messages involving a negative evaluation of qualities of another person pertaining to their behavior, appearance, personality, and other characteristics (Weiss & Tolman, 1990). Criticism is one aspect of conflict behavior in the communication processes that has been labeled as “expressed emotion.” An individual’s expressed emotion regarding a significant other consists of emotional over-involvement and negative feelings toward the other person (Miklowitz, 1995). The present study used the predictor variable “conflict behavior” based on the idea that this variable encompasses the same core concept as “expressed emotion.” It is understood as an evaluation of the extent to which a family member or partner expresses messages in a

hostile or critical approach. It can be concluded that the impact of expressed emotion is similar to that of observers' global ratings of conflict behavior, because both of these variables include perceptions of how much the individual conveys a negative evaluation of the other person. Typically EE has been assessed by means of an extensive interview with a person's significant other, to determine his or her level of over-involvement with the person and negative feelings toward him or her. Renshaw (2008) argues that "Despite the valuable information that this measure of EE can provide about the home environment, the length of the standard interview and the time and cost of coding prohibit an easy extension of this construct into clinical practice. Thus, Hooley and Teasdale (1989) hypothesized that people's overall perceptions of their relatives' criticism, or perceived criticism (PC), might be a quicker and easier way to capture the essence of EE, particularly because criticism is typically the determining factor in whether a relative is designated high-EE (Butzlaff & Hooley, 1998)" (p. 522).

The MICS-G system has demonstrated moderate convergent validity and high discriminant validity among the global categories. Criterion-validity of the MICS-G has been established, as the measure can differentiate between distressed and non-distressed couples (Weiss & Tolman, 1990). (See Appendix C)

Attachment measure. For purposes of this study *attachment style* was measured by the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991), an adaptation and expansion of Hazan and Shaver's (1987) Adult Attachment Questionnaire, which yields dimensional scores on four categories of attachment. Bartholomew and Horowitz drew on the attachment theory presented by Bowlby (1973) and concluded that there are four styles of adult attachment: secure, dismissing, preoccupied, and fearful.

Participants rate themselves on each attachment style on the RQ corresponding to the categories secure, dismissing, preoccupied and fearful, based on the degree to which they consider each description of a style as corresponding to their general pattern in relationships with other people. In Bartholomew and Horowitz's (1991) version of the measure, participants choose the prototype description that best fits how they perceive themselves in close relationships and also rate the degree to which each description fits himself or herself, using a 7-point scale ranging from 1- Not like me at all to 7- Very much like me (Bartholomew & Horowitz, 1991). The RQ, presented in Appendix A, includes four paragraphs detailing each of the four styles of attachment: *secure* ("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"); *dismissing* ("I am somewhat uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I sometimes worry that I will be hurt if I allow myself to become too close to others"); *preoccupied* ("I want to be completely emotionally intimate with others, but I often find that other 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"); and *fearful* ("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"). During the assessment participants are asked to identify which paragraph they feel most represents them and then also to rate each style on a scale of 1-7 on how much each of the paragraphs relates to them. For the present study four scores were generated to test the hypotheses, based on the individual's self-

ratings on the 7-point scales describing how much the paragraphs representing the four attachment styles describe him or her.

Criterion validity has been established for the RQ measure because each of the four attachment styles has been found to be associated with different theoretically related variables, and a distinct profile of interpersonal problems. Bartholomew and Horowitz (1991) explain that each of the four styles should be distinguished by differing profiles including different interpersonal problems such as one's ability to show care-giving, have a balance of control, level of self confidence, reliance on others and emotional expressiveness. The attachment styles should also differ in ways of approaching and thinking about close relationships, which was found to be true in a study by (Bartholomew, 1991). For instance those who are secure value the connection and feel comfortable relying on others and having other rely on them where those who are dismissing tend to place higher value on self-reliance and dismiss the connection of others. These profiles were accurately identified by self-reports and friend-reports adding to the criterion validity. The RQ also exhibits construct validity in that it was related to a semi-structured interview asking participants about their friend relationships relying on the same four-category model of attachment (Bartholomew, 1991).

Perceived criticism measure. For purposes of this study, perceived criticism was measured by the perceived criticism scale developed by Hooley and Teasdale (1989). The H & T Scale measures perceived criticism by asking participants four questions, two about their partner's criticism and two about their own criticism. Two of the questions are designed to assess the respondent's perception of how critical they and their partner were in the discussion they just had. The questions use 10-point likert-type response scales that

ask participants to reflect on how critical they considered themselves and their partner 1- Not at all Critical and 10- Very Critical Indeed. The other two questions ask about their perception of the similarity of the behavior they and their partner just exhibited to that which occurs outside of sessions. The present study used the perceived criticism measure developed by Hooley and Teasdale (1989), specifically question number 1, asking the respondent how critical his or her partner was during their couple discussion (see Appendix B.)

Riso et al. (1996) noted that there was little work done on verifying the validity of the Hooley and Teasdale Scale, so they proposed that perceived criticism could be associated with other variables that affected the relapse of depression previously found by Hooley and Teasdale. In their study they found that perceived criticism demonstrated excellent discriminant validity in that it did not correlate with measures of depression or maladaptive personality traits and exhibited moderate convergent validity by being correlated with social functioning scales.

Gender. For purposes of this study and to explore the research question regarding gender, the Couple Information and Instructions questionnaire was utilized to gather information from the participants on their gender. The Couple Information and Instructions questionnaire was also used to gather demographic information (e.g., age, education, income) about the sample used in this study. The questionnaire was developed by the Center for Healthy Families clinical faculty to gather broad demographic information about the clients seen at the Center (see Appendix B.)

Chapter 4: Results

In this study the predictor variables were one partner's critical comments measured by the MICS-G, the other partner's degrees of secure attachment style (Style A), fearful attachment style (Style B), preoccupied attachment style (Style C), and dismissing attachment style (Style D) measured by their self report on the RQ, and the interaction between the partner's criticism and the other's degree of each attachment style. The criterion variable in this study was the receiving partner's assessment of perceived criticism, as reported on the H&T scale.

Prior to testing the hypotheses Pearson correlations were computed to test the associations among the four types of attachment for each gender. These correlations for males and females are reported in Tables 8 and 9, respectively.

It was found for both males and females that the four styles of attachment are for the most part not significantly correlated, and even the few correlations that reached significance accounted for a very small percentage of shared variance. For example, for men the correlation between Styles A (secure) and B (fearful) was $-.30, p < .001$, indicating only 9% overlapping variance. Thus, the four attachment styles were virtually independent of each other, so it was decided that it was appropriate to conduct separate analyses for each of them. (See Tables 8 and 9).

Table 8: *Correlations Among Styles of Attachment for Men*

	Style A (Secure)	Style B (Fearful)	Style C (Preoccupied)	Style D (Dismissing)
Style A Pearson Correlation (2-tailed <i>p</i>)		-.34 .001	-.08 .448	-.18 .101
Style B Pearson Correlation (2-tailed <i>p</i>)			-.10 .368	.18 .096
Style C Pearson Correlation (2-tailed <i>p</i>)				-.01 .949
Style D Pearson Correlation (2-tailed <i>p</i>)				

Table 9: *Correlations Among Styles of Attachment for Women*

	Style A (Secure)	Style B (Fearful)	Style C (Preoccupied)	Style D (Dismissing)
Style A Pearson Correlation (2-tailed <i>p</i>)		-.45 .000	-.31 .004	-.16 .142
Style B Pearson Correlation (2-tailed <i>p</i>)			.19 .076	-.04 .681
Style C Pearson Correlation (2-tailed <i>p</i>)				-.19 .079
Style D Pearson Correlation (2-tailed <i>p</i>)				

In the second stage of the analysis, the study's hypotheses were tested with Pearson correlations and multiple regression analyses. The findings are described below for each hypothesis.

Hypothesis 1 stated that there would be a positive association between one partner's conflict behavior and the other's perceived criticism. First, a Pearson correlation was computed between women's conflict behavior and men's perception that their partner had been critical. The correlation was $.25, p = .017$, which supported the hypothesis. Similarly, the Pearson correlation between men's conflict behavior and women's perception that their partner had been critical was $.37, p = .001$, which also supported the hypothesis. However, when one partner's critical behavior was used as a predictor of the other's perceived criticism in the multiple regression analyses described below (See Tables 10-17), the relationship was not significant for either sex. The only exception to this pattern was a trend ($\beta = .47, p = .058$) for men's conflict behavior to predict women's perceived criticism in the multiple regression analysis that also included the women's Style A (secure attachment) as a predictor variable. Thus the Pearson correlations did support Hypothesis 1, but the multiple regression analyses did not.

The most likely reason why the associations between critical behavior and perceived criticism were significant in the Pearson correlations but not in the multiple regression analyses is the problem of multicollinearity in the multiple regressions. Multicollinearity results when multiple variables are used simultaneously to account for variance in a dependent variable, those predictor variables are correlated with each other, and they account for overlapping variance in the criterion variable. In each of the multiple regression analyses used in this study, the interaction term involving critical

behavior and one of the attachment styles was constructed as the product of the subjects' scores on critical behavior and the attachment style. Consequently, that interaction variable was necessarily correlated with its two components, and when the component variables and interaction variable are entered into the multiple regression analysis as predictors of the criterion variable (in this case perceived criticism) simultaneously, their shared variance can detract from each one's relationship to the criterion variable. Thus, the Pearson correlations provide useful information about the degree of association between the single variables of critical behavior and perceived criticism.

Hypothesis 2 stated that the more securely attached a person is, the less criticism the individual will perceive from their partner. First, a Pearson correlation was computed between men's secure attachment and their perception that their partner had been critical. The correlation was $-.06, p = .32$, which did not support the hypothesis. A Pearson correlation was also computed between women's secure attachment and their perception that their partner had been critical. The correlation was $-.03, p = .41$, which also did not support the hypothesis. In the multiple regression analyses that included an individual's secure attachment as a predictor of the criticism that they perceived from their partner, Tables 10 and 11 also indicate that males' and females' secure attachment, respectively, did not predict their perceptions of criticism. Thus, there was no support for Hypothesis 2.

Table 10: *Multiple Regression Analysis Predicting Men's Perceived Criticism Using Men's Secure Attachment Style*

Predictor Variable	Beta	<i>t</i>	<i>p</i>
Secure Attachment Style	-.29	-1.55	.13
Women's Conflict Behavior	-.15	-0.55	.58
Interaction*	.50	1.60	.11

* Interaction= Product of Women's Conflict Behavior and Men's Secure Attachment

Table 11: *Multiple Regression Analysis Predicting Women's Perceived Criticism Using Women's Secure Attachment Style*

Predictor Variable	Beta	<i>t</i>	<i>p</i>
Secure Attachment Style	.12	0.66	.51
Men's Conflict Behavior	.47	1.93	.06
Interaction*	-.10	-0.39	.70

* Interaction= Product of Men's Conflict Behavior and Women's Secure Attachment

Hypothesis 3 stated that the more an individual has a fearful attachment style, the more criticism the individual will perceive from their partner. First, a Pearson correlation was computed between men's fearful attachment and their perception that their partner had been critical. The correlation was .04, $p = .37$, which did not support the hypothesis. A Pearson correlation was also computed between women's fearful attachment and their perception that their partner had been critical. The correlation was .05, $p = .33$, which also did not support the hypothesis. In the multiple regression analyses that included an individual's fearful attachment as a predictor of the criticism that they perceived from their partner, Tables 12 and 13 also indicate that males' and females' fearful attachment, respectively, did not predict their perceptions of criticism. Thus, there was no support for Hypothesis 3.

Table 12: *Multiple Regression Analysis Predicting Men's Perceived Criticism Using Men's Fearful Attachment Style*

Predictor Variable	Beta	<i>t</i>	<i>p</i>
Fearful Attachment Style	.34	1.48	.14
Women's Conflict Behavior	.14	0.70	.49
Interaction*	-.11	-0.41	.68

* Interaction= Product of Women's Conflict Behavior and Men's Fearful Attachment

Table 13: *Multiple Regression Analysis Predicting Women's Perceived Criticism Using Women's Fearful Attachment Style*

Predictor Variable	Beta	<i>t</i>	<i>p</i>
Fearful Attachment Style	-.12	-0.36	.72
Men's Conflict Behavior	-.22	-1.24	.22
Interaction*	.59	1.60	.11

* Interaction= Product of Men's Conflict Behavior and Women's Fearful Attachment

Hypothesis 4 stated that the more an individual has a preoccupied attachment style, the more criticism the individual will perceive from their partner. First, a Pearson correlation was computed between men's preoccupied attachment and their perception that their partner had been critical. The correlation was $-.02, p = .44$, which did not support the hypothesis. A Pearson correlation was also computed between women's preoccupied attachment and their perception that their partner had been critical. The correlation was $-.05, p = .34$, which also did not support the hypothesis. In the multiple regression analyses that included an individual's preoccupied attachment as a predictor of the criticism that they perceived from their partner, Tables 14 and 15 also indicate that males' and females' preoccupied attachment, respectively, did not predict their perceptions of criticism. Thus, there was no support for Hypothesis 4.

Table 14: *Multiple Regression Analysis Predicting Men's Perceived Criticism Using Men's Preoccupied Attachment Style*

Predictor Variable	Beta	<i>t</i>	<i>p</i>
Preoccupied Attachment Style	.31	1.51	.14
Women's Conflict Behavior	.003	0.01	.10
Interaction*	-.09	-0.32	.75

*Interaction= Product of Women's Conflict Behavior and Men's Preoccupied Attachment

Table 15: *Multiple Regression Analysis Predicting Women's Perceived Criticism Using Women's Preoccupied Attachment Style*

Predictor Variable	Beta	<i>t</i>	<i>p</i>
Preoccupied Attachment Style	.34	1.67	.10
Men's Conflict Behavior	-.08	-0.42	.67
Interaction*	.04	0.17	.87

* Interaction= Product of Men's Conflict Behavior and Women's Preoccupied Attachment

Hypothesis 5 stated that the more an individual has a dismissive attachment style, the less criticism the individual will perceive from their partner. First, a Pearson correlation was computed between men’s dismissive attachment and their perception that their partner had been critical. The correlation was .05, $p = .35$, which did not support the hypothesis. A Pearson correlation was also computed between women’s dismissive attachment and their perception that their partner had been critical. The correlation was -.05, $p = .34$, which also did not support the hypothesis. In the multiple regression analyses that included an individual’s dismissive attachment as a predictor of the criticism that they perceived from their partner, Tables 14 and 15 also indicate that males’ and females’ dismissive attachment, respectively did not predict their perceptions of criticism. Thus, there was no support for Hypothesis 5.

Table 16: *Multiple Regression Analysis Predicting Men’s Perceived Criticism Using Men’s Dismissing Attachment Style*

Predictor Variable	Beta	<i>t</i>	<i>p</i>
Dismissing Attachment Style	.30	1.33	.19
Women’s Conflict Behavior	.13	0.70	.49
Interaction*	-.04	-0.15	.88

* Interaction= Product of Women’s Conflict Behavior and Men’s Dismissing Attachment

Table 17: *Multiple Regression Analysis Predicting Women’s Perceived Criticism Using Women’s Dismissing Attachment Style*

Predictor Variable	Beta	<i>t</i>	<i>p</i>
Dismissing Attachment Style	.19	0.91	.37
Men’s Conflict Behavior	-.15	-0.82	.42
Interaction*	.26	1.07	.29

* Interaction= Product of Men’s Conflict Behavior and Women’s Dismissing Attachment

Next, the moderation effect was explored by computing a Pearson correlation and a multiple regression for the interaction terms variables comprised of one partner’s conflict behavior and each of the other’s attachment style scores, for each gender. In

order to measure the moderation effect of the attachment styles the product of one partner's conflict behavior and the attachment style of the other was computed. As noted earlier, this procedure created the likely problem of multicollinearity among the predictor variables in the analyses. One strategy that has commonly been used by researchers to attempt to reduce multicollinearity effects is to "center" each variable that is used to construct an interaction term. Centering involves computing the mean of each independent variable, and then calculating the difference between each subject's score on that variable and the mean for the variable and substituting that value for the subject's raw score. However, Echambadi and Hess (2007) found that the procedure of centering is ineffective in reducing multicollinearity, and they argue against using it in tests of interaction effects in multiple-regression analyses. Consequently, in the present study no centering of variables was done. In order to achieve a more clear understanding of the relationship between an interaction variable and the criterion variable of perceived criticism, the Pearson correlation between each interaction term and perceived criticism was examined in addition to the relationship between the interaction term and perceived criticism in the multiple regression analysis. If either test indicated a significant association between the interaction variable and perceived criticism, the pattern of the interaction effect was explored.

In each of the multiple regression analyses, an individual's actual conflict behavior score, one of their partner's attachment style scores (secure, preoccupied, fearful, or dismissing), and the interaction term (the product of the conflict behavior and partner's attachment scores) were entered simultaneously to determine the degrees to which it they were associated with the partner's criterion variable of perceived criticism,

as measured by the H&T Scale. The male partner's actual conflict behavior was run with the female partner's perceived criticism, and vice versa. All analyses were conducted separately for female and male partners.

The approach used to explore an interaction effect involved calculating the four cell means for perceived criticism in a 2 X 2 matrix based on higher versus lower levels of a partner's conflict behavior and higher versus lower levels of the other partner's attachment style. In order to do this, the distributions of scores on the measures for the men's and women's actual conflict behavior and the amount to which the individual considered themselves similar to each attachment style were re-coded as either higher or lower by median splits. Perceived criticism means were calculated for the four resulting groups (own higher attachment style and higher partner conflict behavior, own higher attachment style and lower partner conflict behavior, own lower attachment style and higher partner conflict behavior, own lower attachment style and lower partner conflict behavior). This was done for each analysis where there was a trend ($p < .10$) or significant ($p < .05$) effect for an interaction between the one partner's level of conflict behavior and the degree to which the other partner endorsed a particular attachment style.

Hypothesis 6 stated that the secure attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of secure attachment the association between actual and perceived criticism will be lower than when the receiver has a lower level of secure attachment. The Pearson correlation between the interaction between women's conflict behavior and men's secure attachment was .24, $p = .02$, and for men's conflict behavior and women's secure attachment the correlation was .28, $p =$

.01. Those interaction effects were not significant in the multiple regression analyses, but due to the significance found in the Pearson correlations for both the men's and women's interaction terms the perceived criticism means based on median splits as described above were examined to explore the patterns of the interaction effects (See Tables 18 and 19).

Table 18: *Perceived Criticism Cell Means for Interaction Between Men's Secure Attachment and Women's Conflict Behavior*

	Women's Conflict Behavior Lower	Women's Conflict Behavior Higher
Male's Secure Attachment Lower	5.43 (n = 14)	5.45 (n = 20)
Male's Secure Attachment Higher	4.32 (n = 19)	6.37 (n = 19)

Dependent Variable: Male's H&T perceived criticism

The effect found was that when men were higher on secure attachment they were more perceptive of the conflict behavior of their partner. When men were lower on secure attachment they showed little differentiation between lower and higher amounts of criticism, perceiving a consistently moderate amount of it no matter how their partner behaved. When secure attachment is lower, the difference between the means is 0.02 and when men's secure attachment is higher the differences is 2.05, meaning that when the level of secure attachment is higher it influences the relationship between women's level of conflict behavior and men's perceptions of criticism.

Table 19: *Perceived Criticism Cell Means for Interaction Between Women's Secure Attachment and Men's Conflict Behavior*

	Male's Conflict Behavior Lower	Male's Conflict Behavior Higher
Women's Secure Attachment Lower	4.00 (n = 11)	5.60 (n = 20)
Women's Secure Attachment Higher	4.27 (n = 26)	5.71 (n = 14)

Dependent Variable: Women's H&T perceived criticism

Based on these cell means it appears that there is no effect for the interaction between women's secure attachment and men's conflict behavior. When secure

attachment is lower the difference between the means is 1.60 and when secure attachment is higher the difference between the means is 1.44. This means there is little difference when women's secure attachment is higher or lower on the relationship between men's degree of conflict behavior and the women's perceptions of the man's behavioral as critical.

Hypothesis 7 stated that the fearful attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of fearful insecure attachment the association between actual and perceived criticism will be higher than when the receiver has a lower level of fearful insecure attachment. Looking at the interaction for women's conflict and men's fearful attachment the correlation was $.19, p = .055$ displaying a trend; and for men's conflict and for women's fearful attachment the correlation was $.38, p = <.001$. Those interaction effects were not significant in the corresponding multiple regression analyses. Due to the trend for men and the significance found for women's interaction effect in the Pearson correlations, the perceived criticism cell means were explored (See Tables 20 and 21).

Table 20: *Perceived Criticism Cell Means for Interaction Between Men's Fearful Attachment and Women's Conflict Behavior*

	Women's Conflict Behavior Lower	Women's Conflict Behavior Higher
Male's Fearful Attachment Lower	4.50 (n = 16)	5.84 (n = 19)
Male's Fearful Attachment Higher	5.06 (n = 17)	5.95 (n = 20)

Dependent Variable: Male's H&T perceived criticism

The effect found was that when men were lower on fearful attachment they were more sensitive to the level of the women's criticism (the level that they perceived was associated with the level that their partner exhibited), whereas when the men were higher

on fearful attachment they reported a moderate level of criticism no matter how their partner behaved. When fearful attachment is lower the difference between the means is 1.34 and when fearful attachment is higher the difference between the means is 0.89, meaning that when the men's level of fearful attachment is lower it increases the relationship between women's level of conflict behavior and men's perceptions of criticism more than when the attachment is higher.

Table 21: *Perceived Criticism Cell Means for Interaction Between Women's Fearful Attachment and Men's Conflict Behavior*

	Male's Conflict Behavior Lower	Male's Conflict Behavior Higher
Women's Fearful Attachment Lower	4.41 (n = 22)	4.87 (n = 15)
Women's Fearful Attachment Higher	3.69 (n = 16)	6.26 (n = 19)

Dependent Variable: Women's H&T perceived criticism

The effect found was that when women were higher in fearful attachment there was a greater association between men's conflict behavior and the to the level of criticism that the women perceived, whereas when they were lower in fearful attachment their perception of criticism varied little based on their partner's level of conflict behavior. When fearful attachment is lower the difference between the means is 0.46 and when fearful attachment is higher the difference between the means is 2.57, meaning that when the women's level of fearful attachment is higher it increases the relationship between men's level of conflict behavior and women's perceptions of criticism.

Hypothesis 8 stated that the preoccupied attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of preoccupied insecure attachment the association between actual and perceived criticism will be higher than when the receiver has a lower level of preoccupied insecure attachment. Looking at the

interaction for women’s conflict and men’s preoccupied attachment the correlation was .12, $p = .15$ and for men’s conflict and women’s preoccupied attachment the correlation was .22, $p = .03$. The interaction effects were not significant in the multiple regression analyses, but due to the significance found in the Pearson correlation for the women’s interaction, the cell means were explored (See Table 22).

Table 22: *Perceived Criticism Cell Means for Interaction Between Women’s Preoccupied Attachment and Men’s Conflict Behavior*

	Male’s Conflict Behavior Lower	Male’s Conflict Behavior Higher
Women’s Preoccupied Attachment Lower	4.42 (n = 19)	5.45 (n = 20)
Women’s Preoccupied Attachment Higher	3.79 (n = 19)	5.93 (n = 14)

Dependent Variable: Women’s H&T perceived criticism

The effect found was that when women’s preoccupied attachment was higher there was a greater association between level of men’s conflict behavior and the level of the critical behavior the women perceived than when their preoccupied attachment was lower. When preoccupied attachment is lower the difference between the means is 1.03 and when preoccupied attachment is higher the difference between the means is 2.14, meaning that the woman’s level of preoccupied attachment does moderate the relationship between men's level of conflict behavior and women's perceptions of criticism, in the hypothesized direction.

Hypothesis 9 stated that the dismissing attachment style of the recipient of criticism moderates the relation between one person’s conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of dismissing insecure attachment the association between actual and perceived criticism will be lower than when the receiver has a lower level of dismissing insecure attachment. Looking at the interaction for women’s conflict and men’s dismissing attachment the correlation was

.22, $p = .03$ and for men's conflict and women's dismissing attachment the correlation was .31, $p = .004$. Although these interaction effects were not found in the multiple regression analyses, due to the significance found in the Pearson correlation analyses for both the men and women's interactions, the perceived criticism cell means were explored (See Tables 23 and 24).

Table 23: *Perceived Criticism Cell Means for Interaction Between Men's Dismissive Attachment and Women's Conflict Behavior*

	Women's Conflict Behavior Lower	Women's Conflict Behavior Higher
Men's Dismissive Attachment Lower	4.29 (n = 14)	6.00 (n = 23)
Men's Dismissive Attachment Higher	5.16 (n = 19)	5.75 (n = 16)

Dependent Variable: Male's H&T perceived criticism

The effect found was that when men's dismissive attachment was lower there was a greater association between women's degree of conflict behavior and men's perception of criticism, compared to when men's dismissive attachment was higher and they perceived a moderate level of criticism no matter how their partner behaved. When dismissive attachment is lower the difference between the means is 1.71 and when dismissive attachment is higher the difference between the means is 0.39, meaning that when the level of dismissive attachment is lower it influences the relationship between women's level of conflict behavior and men's perceptions of criticism more.

Table 24: *Perceived Criticism Cell Means for Interaction Between Women's Dismissive Attachment and Men's Conflict Behavior*

	Male's Conflict Behavior Lower	Male's Conflict Behavior Higher
Women's Dismissive Attachment Lower	4.53 (n = 19)	5.00 (n = 14)
Women's Dismissive Attachment Higher	3.68 (n = 19)	6.10 (n = 20)

Dependent Variable: Women's H&T perceived criticism

The effect found was that when women's dismissive attachment was higher there was a greater association between men's level of conflict behavior and women's level of

perception of the men's criticism, compared to when women's dismissive attachment was lower and they perceived a moderate level of criticism no matter how their partner behaved. When dismissive attachment is lower the difference between the means is 0.47 and when dismissive attachment is higher the difference between the means is 2.42, meaning that when women's level of dismissive attachment is higher it influences the relationship between men's level of conflict behavior and women's perceptions of criticism more.

Chapter 5: Discussion

This study was undertaken in an attempt to better understand couple communication processes and the potential factors including attachment style and criticism that affect the partners' perceptions of their communication. Knowledge about factors influencing perceived criticism is important due to substantial prior research findings indicating that perceived criticism has negative effects on partners' individual well-being as well as on the quality and stability of their relationships. This study was ultimately conducted to enlighten researchers and clinicians about ways to change negative couple communication by intervening both with the sender of messages (how messages are conveyed) and with characteristics that the receiver brings to the conversation that might affect the way the message is received. It was expected that a partner's style of attachment would moderate the association between the amount of criticism expressed by one member of a couple and the amount of criticism that the other member perceives.

Summary of Overall Findings

Table 25: *Summary of Overall Findings*

Hypothesis	Men	Women
1. A positive association between one partner's conflict behavior and the other's perceived criticism would be found.	Supported	Supported
2. The more securely attached a person is, the less criticism the individual will perceive from their partner.	Not Supported	Not Supported
3. The more an individual has a preoccupied attachment style, the more criticism the individual will perceive from their partner.	Not Supported	Not Supported
4. The more an individual has a fearful attachment style, the more criticism the individual will perceive from their partner.	Not Supported	Not Supported

5. The more an individual has a dismissive attachment style, the less criticism the individual will perceive from their partner.	Not Supported	Not Supported
6. Secure attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of secure attachment the association between actual and perceived criticism will be lower than when the receiver has a lower level of secure attachment.	Not Supported	Not Supported
7. Fearful attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of fearful insecure attachment the association between actual and perceived criticism will be higher than when the receiver has a lower level of fearful insecure attachment.	Not Supported	Supported
8. Preoccupied attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of preoccupied insecure attachment the association between actual and perceived criticism will be higher than when the receiver has a lower level of preoccupied insecure attachment.	Not Explored	Supported
9. Dismissing attachment style of the recipient of criticism moderates the relation between one person's conflict behavior and the criticism that the partner perceives. When a receiver has a higher level of dismissing insecure attachment the association between actual and perceived criticism will be lower than when the receiver has a lower level of dismissing insecure attachment.	Supported	Not Supported

Styles of attachment were not found to be significantly inter-correlated, and the minimal correlations among them only accounted for a small percentage of shared variance. Due to this finding it, was clear that these variables were relatively independent constructs of attachment, and separate analyses could be conducted for each of them.

The hypothesis that there would be a positive correlation between the actual amount of criticism in the conflict behavior and the amount of perceived criticism for both sexes was tested by both a Pearson correlation and a multiple regression analysis, to clarify relationships of predictor variables (actual conflict behavior, attachment styles, and interactions between actual criticism and attachment styles) with perceived criticism, given the existence of multicollinearity among the predictors. The Pearson correlation for women's conflict and men's perception of criticism from their partners supported this hypothesis, as did the Pearson correlation between men's conflict and women's perception of criticism from their partners. However the multiple regressions did not result in significant findings regarding this hypothesis for either sex, presumably due to the effect of multicollinearity. Thus, the findings of this study indicate that the amount of criticism that individuals perceive from their partners is at least partly a function of the negative communication that the partners exhibit to outsiders (in this case the coders for this study), but the association is not strong.

Next the hypotheses about each attachment style being directly associated with the amount of criticism perceived by the partner were tested. Each attachment style's effect was assessed using both the Pearson correlation and multiple regression analyses. For both men and women's secure attachment style, there were no significant results to suggest that this style predicts their perception of criticism. The same was true for the fearful, preoccupied and dismissing attachment styles for both men and women. Therefore, there was no support for hypotheses 2-5.

Next, the roles of individuals' attachment styles as moderators of the relationship between degree of partner's critical behavior and the individual's perceived criticism

were investigated, again using both the Pearson correlations and a multiple regression analysis to examine the interaction effect (product of one partner's conflict behavior and the other's attachment style). The findings varied by attachment style and gender. For men and women's secure attachment, the moderation (interaction) effect was not significant in the multiple regression analyses, but it was significant in the Pearson correlation analyses that were not influenced by multicollinearity effects. For the fearful attachment style a trend was found in the Pearson correlation for men and a significant result in the Pearson correlation for women, although neither displayed a significant effect in the multiple regression analyses. For the preoccupied attachment style there was no significant moderation (interaction) effect found for men in the Pearson correlation or the multiple regression analysis; however, a significant effect was found for women with the Pearson correlation analysis. For the dismissing attachment style the interaction effect was significant in the Pearson correlations for both females and males, but not in the multiple regression analyses. Again the difference in results for the Pearson correlations and the multiple regression analyses is presumed to be due to the effect of multicollinearity. Overall, the significant interaction effects, in contrast to the lack of significant main effect associations between attachment styles and perceived criticism, suggest that attachment styles do have influences on relationship quality, but not in a simple direct way.

Based on the significant effects found for the Pearson correlations, the patterns of the interaction effects were explored with a 2 X 2 matrix created by calculating the perceived criticism cell means for the partners who were either higher or lower in each attachment style and higher or lower in the amount of conflict behavior received from

their partner. This matrix of cell means was calculated for each significant interaction effect or for any statistical trend ($p < .10$). The effects of the interactions produced results that varied for each gender. For the women there was no effect for the secure attachment, but for men it was found that the higher they are in secure attachment the higher the association there was to their partner's conflict behavior (i.e., their ratings of perceived criticism were associated with actual levels of conflict behavior by their partner). The fearful attachment style had opposite effects based on gender; for the women the higher they were on fearful attachment the more association there was to their partner's conflict behavior, whereas the lower the men were on fearful attachment the less association there was to the partner's behavior. The exploration of the perceived criticism cell means for men's levels of preoccupied attachment was not conducted due to the insignificant findings of the Pearson correlation and the multiple regression analysis. However, for women higher levels of preoccupied attachment apparently increased their sensitivity to their partner's conflict behavior; i.e., their perceptions of criticism varied according to how much their partner actually exhibited conflict behavior more so when the women were higher in the preoccupied attachment style. The interaction cell means for men's and women's dismissing attachment were also found to be opposite, in that the higher the women were in dismissing attachment the more association there was in her perceiving criticism based on their partner's level of conflict behavior. In contrast, the lower men were, in dismissive attachment, the more association there was to his perception of his partner's level of criticism.

Understanding the Results within the Context of Previous Research

The findings of this study are consistent with previous research that has shown partners' attachment styles influence aspects of their couple relationships. Insecure attachment previously was found to be associated with negative couple communication (Kobak & Hazan, 1991) and negative communication involving criticism, (especially contempt rather than expressions of anger) strongly predicted separation and divorce (Gottman, 1994). Pistole and Arricale (2003) found that those who reported a secure attachment style on a self-report questionnaire also reported less "fighting" and more effective arguing than those who were fearfully attached. This study, similar to previous research, found that there are significant differences in the impact of the various attachment styles on communication and conflict outcomes, although the present study focused more on the recipient of messages than on the sender. Pistole and Arricale (2003) also noted that those who are securely attached experience less "threat" during arguments than those who are preoccupied or fearfully attached. Pistole (1989) identified distinct differences in the attachment styles and the use of conflict management strategies and found that secure people tended to use a compromising strategy more than other styles. Pistole (1989) also found evidence that attachment is positively related to constructive conflict management including high assertiveness and less verbal aggression, which has been used to explain constructive (affectionate) teasing. This study also found that there are different implications for each attachment style and the criticism perceived. These differences suggest that each attachment style should be treated as a different schema that individuals apply to understanding events in their personal relationships,

The findings of this study supported the hypothesis for men and women and produced results that showed that there is a positive relationship between conflict behavior and perceived criticism, similar to the work of Hooley and Teasdale (1989). This finding means that when there is negative conflict behavior in a relationship that both the male and female partners are aware of this and report it as occurring. This validates previous research stating that negative communication behavior has negative effects, because it indicates that individuals are sensitive to what occurs in their relationship.

However, the results were only moderate in strength. The modest association may have resulted for several reasons, such as the weaknesses of the measures of conflict behavior and perceived criticism; the limitations are discussed later in this chapter. The aspects of couple communication assessed by the conflict codes of the MICS-G may not be the most relevant aspects of partner behavior that lead individuals to perceive that their partner has been critical of them. It also is possible that individuals' perceptions are colored by their pre-existing global perceptions and emotions regarding their partner, a process that Weiss (1980) labeled as negative sentiment override. Perceived criticism may reflect the actual conflict behavior that individuals receive from their significant others; however, the perceived criticism may also be based on the receiver's perceptual biases. Thus, Hooley and Teasdale (1989) suggest that when individuals who report high levels of perceived criticism actually live in highly critical home environments, interventions can target reducing the negative behavior of the family members. For those who perceive high levels of criticism from relatively non-critical significant others, a form of cognitive therapy might be appropriate to reduce their negative perceptions.

Hooley and Teasdale note that the behavior perceived may be related to what is actually occurring or it may be a result of distorted perceptions on the recipients part due to past relationship issues.

This ultimately means that there is significance for the couple in the message that is communicated, as the receiver often accurately perceives the true meaning, especially in the amount of criticism. This is an important finding, because it allows for clinicians to recognize the importance in continuing helping expressers convey the message they intend, via the use of communication skills. It also allows for the knowledge that when the messages are highly critical, partners pick up on this detrimental display of information about each other's current emotions, needs, or preferences, circumstances (Epstein & Baucom, 2002); and clinicians can help the sender express their negative feelings in a more constructive and less damaging manner. It is helpful for researchers, clinicians, and therapy clients themselves to be aware of the actual impact that negative messages have on couple relationships and to explore ways to foster clear and constructive communication.

It was found that none of the four attachment styles *directly* affected the amount of perceived criticism reported. No direct associations were found either in the Pearson correlations or in the multiple regression analyses, suggesting that multicollinearity among predictor variables is unlikely to be the explanation for the lack of a relationship. This lack of support for the hypothesis might also be explained by the sample of clinical couples, in which the difference between them might exist but be so minimal since they are all couples experiencing distress. However, there were several interaction effects found for the different attachment styles. The interaction effects found do indicate that

attachment styles have influences on perceived criticism, but they indicate that their influences only occur in combination with events occurring in a couple's interactions.

In general this study supports the idea of the association between attachment styles and some aspects of the quality of relationships, but these findings are somewhat inconsistent with the prior research findings in that past research was able to display a direct relationship. The past research posited that adult attachment was found to be related to marital quality and satisfaction. Moreover, insecure attachment was directly associated with negative couple communication (Kobak & Hazan, 1991) and secure attachment is related to more positive interaction and less conflict (Cohn, Silver, Cowan & Pearson, 1992). However, the inconsistent findings could be a result of the fact that the variable of "perceived criticism" may be fundamentally different from the variables that were measured in the other studies and this difference in the construct could account for the non-significant findings. The non-significant findings could also be accounted for in the way the study was conducted, by using the four distinct styles as opposed to the global ratings of "secure" and "insecure" attachment.

It appears that the influence of attachment styles was not direct but rather depended on the situation; i.e., how much negative communication the partners were receiving from their companion. These results align with the working model concept in attachment theory, in that people all hold their schemas about attachment to others, but they are not always triggered. It often takes a relevant stimulus to activate them; in this case it is their partner's negative communication behavior. Berman, Marcus, and Berman (1994) explain this as the concept that there are two distinct activators of attachment: "primary activators" and "secondary activators." The primary activators are the constant

stimuli that form the basis of and identify a person with the attachment IWM (internal working model) and the secondary activators are the stimuli within an interaction that induce the attachment schema, resulting consequently in how information is processed through the attachment IWM. Primary activation happens only once per relationship, whereas secondary activation occurs continuously in a relationship. Berman, Marcus, and Berman (1994) state, “any behavior can be interpreted as an attachment activator if it alters the psychological proximity or distance within the dyad, hence altering anxiety-security” (p. 215). Thus, the response elicited was in direct relation to the interaction and the stimuli presented by their partner- therefore, potentially affecting the amount of criticism perceived. Although no direct relation was found between the attachment and the perception in the context of the secondary activator, the effect of the attachment was seen in the criticism perceived.

Post hoc analyses were conducted as there was no predisposed assumptions about whether there is a gender difference in (a) the relationship between actual and perceived criticism, (b) the relationships of secure and insecure attachment with perceived criticism, and (c) the roles of secure and insecure attachment as moderators of the relationship between actual and perceived criticism. In general the genders both showed a positive association for the relationship between actual behavior and perceived criticism; no relationship for either gender in the correlation of attachment style and perceived criticism; and that attachment styles tended to result in opposite effects as moderators of the relationship between level of partner’s conflict behavior and level of criticism perceived for men versus for women. These gender differences might be accounted for by

the previous research surrounding attachment styles, and communication behaviors among the sexes.

There were gender differences found for the moderation effects of the different attachment styles on both partners' amounts of perceived criticism, as reflected in the 2 X 2 matrices that explored the interaction effects. The gender differences are similar to the differences in gender found by Kobak and Hazan (1991). Kobak and Hazan (1991) found "that spouses' attachment security would influence their ability to maintain constructive communication during problem solving" (p. 864). They found that both husbands' and wives' attachment security produced those effects. And ultimately they found that men and women's responses to their partner's availability affected their marital satisfaction. Similarly, this study found that gender differences exist for several attachment styles and how the male and female partners interpret each other's behavior. This current study also is consistent with findings of Kobak and Hazan (1991), regarding effects of each partner's behavior on the other. For example, they found that "husbands' attachment security was associated with their wives' dysfunctional anger during problem solving, and the wives' security covaried with husbands' ability to listen in the confiding task" (p. 865). This study also supports what Kobak and Hazan (1991) found about the effects of a partner's behaviors, in that this study viewed the dependent variable (perceived criticism) as an outcome of the interaction of both partners' characteristics. This means that the findings support the hypothesis that there are differences in the effects of attachment styles; however, it is a challenge to determine the direction of causality, as the variables (partners' attachment styles and communication behavior) mutually influence each other.

The hypothesis that when a receiver has a higher level of secure attachment the association between actual and perceived criticism will be lower than when the receiver has a lower level of secure attachment was not found to be supported for either men or women. However, there was a moderation effect found for men although it wasn't what was hypothesized; the moderation effect found was that when men were high on secure attachment the association was actually stronger not lower.

This means that secure attachment amplifies the association between one person's criticism and the other's perception of being criticized. This could point to the concept that the more securely attached a man is the more in tune he is with his partner, including his partner's behavior. Therefore, a securely attached man may be more aware of the amount of actual conflict behavior exhibited by his partner or he may be more reactive and sensitive to the criticism. This validates that perceived criticism may reflect the actual conflict behavior that individuals receive from their significant others, however, the perceived criticism may also be based on the receiver's perceptual biases (Hooley & Teasdale, 1989).

The present study's findings suggest that higher levels of secure attachment affect men's perceptions of their partner's negative communication more than secure attachment affects perceptions by women. This might reflect important differences in the genders, signifying that although it has previously been found that men are less relationship focused than women, perhaps men who reach a secure attachment benefit from those interactions and become more aware of their partner's communication behavior.

Berman, Marcus, and Berman (1994) state, “any behavior can be interpreted as an attachment activator if it alters the psychological proximity or distance within the dyad, hence altering anxiety-security” (p. 215); so the response elicited was in direct relation to the interaction and the stimuli presented by their partner. It is also important to learn how the repetitive secondary activators affect the more stable primary activators of attachment over time, and thus how secure attachment is sustained in the presence of negative interactions like conflict behavior.

These current findings may indicate that men who have not developed secure attachment starting early in life may actually be highly attuned to and responsive to signs of potential rejection from their partners. The findings suggest that there still is much to be learned how males and females subjectively experience their intimate relationships, and the effects of secure attachment on their perception of the communication they experience.

The hypothesis that when a receiver has a higher level of fearful insecure attachment the association between actual and perceived criticism will be higher than when the receiver has a lower level of fearful insecure attachment was not found to be supported for men but was supported for women. However, there was a moderation effect found for men although it was the opposite of what was hypothesized; the moderation effect found was that when men were low on secure attachment the association was stronger.

The fearful attachment style had opposite effects based on gender; for the women the higher they were on the fearful attachment the more association there was to their partner’s conflict behavior, where the lower the men were on fearful attachment the

greater an association was found. The explanation for this could be that men and women differ in their reasoning in being fearfully attached to their partner, which then manifests differently in their interactions and perceptions. For example, it has been demonstrated that women are focused on intimate relationships than men are and pay more attention to the inner workings of the bonds (Gilligan, 1982). Consequently, it may be possible that women who are more fearfully attached are hypersensitive to the conflict behavior of the partner as a fear that the behavior is a signal of the dissolution of the relationship. It is also possible that the women who are higher in fearful attachment are hypersensitive to the criticism as a confirmation of fear of being close to their partner, and fear that their partner is either dissatisfied with them or the relationship, which would validate the women's working model of a negative view of self and others (Bartholomew & Horowitz, 1991).

Another reason for this difference in the genders is that the sample for this study was selected from a collection of clinical couples many of which had some history of some degree of abusive behavior, which may be related to their fearful attachment. Assuming a history of violence, the women may again be hypersensitive to any criticism, or conflict behavior as a fear of a precursor to an episode of violence. As mentioned before, much of the women's secondary activators may have been negative in nature affecting their psychological proximity.

For men, the fact that when they are lower on secure attachment the association to their perception of their partner's conflict behavior was stronger could be related to the fact that they were more sensitive to their partners when they are more secure, whereas they may cope with fearful attachment by tuning out threatening information from their

partner. Men have consistently been proven to be the partner who withdraws in couple communication demand-withdraw patterns (Christensen & Heavey, 1990). Based on this pattern, it may be that these men are trying to avoid or withdraw from the conflict behavior and are more fearful of the relationship.

The hypothesis that when a receiver has a higher level of preoccupied insecure attachment the association between actual and perceived criticism will be higher than when the receiver has a lower level of preoccupied insecure attachment was found to be supported for women and was not explored for men. It was found that the higher the women were on preoccupied attachment the more aware they were of their partner's critical behavior. This could be explained by the understanding that women who are high in preoccupied attachment might be more sensitive to any negative behavior as a fear of losing the relationship; it also may support their working model of a negative view of others. This finding is supported by the previous research about preoccupied attachment and the internal working model, in that those who have a preoccupied attachment are found to demonstrate excessive attention to and need for intimate relationships, defining his or her self-worth by acceptance from others. The inconsistent aspect of the findings is that this did not hold true for men. One reason may be that when men become more anxious they cope with it by trying to minimize it and by tuning out information from their partners. This interaction for men may be cognitive avoidance in action, it is also possible that a demand-withdraw pattern of couple communication is in play, in which women are more likely to pursue partners to deal with issues and men are more likely to withdraw (Greenberg & Johnson, 1988). In past studies the focus has been on physical

withdrawal; in this study the withdrawal may be cognitive avoidance, based on the effect of different attachment styles.

The hypothesis that when a receiver has a higher level of dismissive attachment the association between actual and perceived criticism will be lower than when the receiver has a lower level of dismissive insecure attachment was not found to be supported for women, but it was for men. There was a moderation effect found for women, although it was not what was hypothesized; the moderation effect found was that when women were high on dismissive insecure attachment the association was stronger. The interaction means for men and women's dismissing attachment were also found to reflect opposite patterns, in that the higher women are in dismissing attachment the more sensitive they are to their partner's conflict behavior. In contrast, when men are lower in dismissive attachment they are more sensitive to their partner's criticism. This may be a result of these women using the criticism of their partner to further give them rationale that close relationships are unnecessary, whereas when men are low on dismissing attachment they are more aware of their partner's behavior. This result may be true due to gender differences in ways of handling conflict, as well as the more common occurrence of men identifying themselves as having a dismissing attachment style (Brennan, Clark, & Shaver, 1998; Scharfe & Bartholomew, 1994).

These gender differences might be accounted for by the prior research, which found that, men tend to be more dismissing and indifferent than women (Brennan, Clark, & Shaver, 1998; Scharfe & Bartholomew, 1994), which corresponds with general societal beliefs about the emotional unavailability of men (Bem, 1993; Spence & Helmreich, 1978). Although the findings that men report more dismissive attachment than women

do, Kobak and Hazan (1991) also found that when “wives displayed more rejection and less support during problem solving, husbands were less secure, describing their wives as psychologically unavailable” (p. 865). This suggests that men’s dismissive styles likely represent a mode of coping with underlying insecurity (consistent with attachment theory) rather than indicating that men have little need for intimate connection with their partner.

Overall, it appeared that when women were more fearful, preoccupied, or dismissive they were more responsive to the critical behavior of their partners, whereas men were low on fearful and dismissing, but not secure they were more aware of their partner’s critical behavior. These differences could be explained by the internal working model theory that for men may be similar on their responses to dismissing and fearful forms of attachment because those two models involve a negative view of others, supporting either their view of the unimportance of relationships or the effect of their withdraw behaviors. For the women, being more reflective when they are higher in each attachment style could be based on the concept that women respond more to the connection of interpersonal relationships.

Some of these findings support moderation more than others do for each attachment style, as well as for each gender. Some styles such as fearful and dismissing attachments for women and secure attachment for men seem to sensitize the people to their partner’s criticism (strengthening the association between actual and perceived criticism) whereas in some other instances an attachment style such as fearful or dismissing led people to react less to the criticism. As noted above, these differences in

effects of attachment styles might reflect individuals' ways of coping with the distress that may be associated with insecurity.

In general the findings show that there are gender differences in the effects of being higher or lower in each attachment style and that these differences regulate how people perceive their partners' behavior. Thus, there does not seem to be one overall effect for each attachment style, but rather different "filters" for men and women's attachment styles that affect the way messages are received.

The patterns in the findings differ from one attachment style to another, which underscores the value of differentiating among the styles and assessing them separately both in research and in clinical work with clients. Therefore, this study demonstrates that attachment styles are an important characteristic of people to assess and take into account in understanding the processes that affect the quality of intimate relationships.

In summary, this study, as compared to prior research, also has found that attachment styles affect people's intimate relationships. Kobak and Hazan (1991) investigated the associations of adult attachment styles to specific behavioral interactions in married couples, and their data showed significant correlations between attachment security and marital quality and satisfaction. However, the present study did not show that attachment styles alone affect the amount of perceived criticism. However, when context is taken into consideration and attachment is viewed as having a moderating effect in the couple's negative communication, it has significant implications for intimate relationships. The findings show that different attachment styles have different effects on men and women's communication, which, further supports the motivation for conducting this study.

Limitations of the Current Study

The current study had limitations that may have affected the results that were obtained. It is possible that these limitations could be controlled for or avoided in future studies. One limitation regarding sampling is that the population from which the sample was drawn is a specialized group of couples who sought therapy for relationship distress, and many of them had been identified as having experienced some degree of physically and/or psychologically aggressive behavior in their relationship. This type of history might especially sensitize individuals to any signs of criticism and other forms of negative communication from their partners, possibly overriding influences of attachment styles. On the other hand, a history of aggressive behavior might lead partners to under-rate criticism that they perceived during their couple communication samples, particularly if the negative behavior was mild compared to more aggressive behavior to which they were accustomed. Couples also may have been at least somewhat inhibited from expressing negative messages to each other when they knew that their communication was being recorded for later analysis by the researchers. In any case, the characteristics of this sample and the setting in which the behavioral sample was collected likely limit the generalizability of the findings to couples with other types of histories and in other communication contexts. It is unknown whether the patterns observed in this study also would be seen in non-clinical couples.

This study did not control for or take into consideration the participants' levels of psychopathology symptoms or emotional regulation as factors potentially influencing the impact that partners' messages have on each person. These are important factors to monitor as they may have influenced the results. For example if a person is incapable of

emotional regulation he or she may have both displayed and perceived extreme amounts of critical behavior. This study did not examine the partners' responses on measures that address mental illness (such as depression). According to past research, (Walt, Kramer, & France, 2001) individuals experiencing significant issues regarding mental illness or psychopathology may not be in an emotional state to answer the questions on the assessments accurately and their current psychological state may affect their interpersonal interactions, and awareness to their partner. This study also did not look at the commitment to the relationship; if one partner is dissatisfied or thinking of leaving a relationship, he or she may already be disengaging or lessening the attachment with the partner to protect themselves from being hurt when the relationship dissolves. Therefore the "typical" response to their attachment style might not have been captured. However, this study aimed to test whether an individual's degree of attachment security is associated with the degree of criticism that the individual perceives from the partner. Yet, this study failed to address the effect the speaker's attachment style might have on the message, which in turn might influence what is perceived.

In addition to limitations associated with the sample and the context in which their communication was assessed, another limitation of this study involves the standardized self-report measures used to assess the couples. As a measure of attachment style the RQ (Bartholomew & Horowitz, 1991) asks respondents to choose which of the brief paragraphs describing the four styles is most like them, and then in four subsequent questions asks them to rate how similar each style is to them. An issue with the RQ is that it fails assess who is present in their mind when they respond to the items. This can reduce the validity of the measure in a study of attachment styles affecting couple

relationships, because it is possible that people have different attachments to different people in their lives. For example, an individual may have a long history of stable and secure relationships with friends but have had a painful experience of being abandoned by an intimate partner. This individual may have a fairly secure attachment to people who are friends but have an insecure attachment regarding a partner or spouse. It is difficult to know whom the respondent was thinking about when they answered, and if it applies to the relationship with their partner. Another issue with the RQ (Bartholomew & Horowitz, 1991) is that although it asks for respondents to think about how they are attached to others in general, it could be easy for people to think of how they would like their attachment to be with others. These factors probably reduce the validity of the RQ as a measure of attachment styles that may influence couple communication, and stronger findings might be found if a different measure was used.

Another similar limitation surrounds the use of the H & T Scale (Hooley & Teasdale, 1989) to measure perceived criticism. Although the scale has empirical evidence supporting it, it relies on only one item to assess a central variable in this study asking about the amount of criticism perceived by the individual following the couple's discussion. The H & T scale also only asks about criticism in general and fails to specify if it was verbal or affect factors that were seen as critical. It also only asks how critical the respondent thinks that his or her partner behaved, without detailing whether the perceived criticism was constructive or destructive. Thus, the assessment of perceived criticism was fairly limited, and it did not correspond to the various types of negative behavior that the MICS-G assessed in the study.

Although the MICS-G (Weiss & Tolman, 1990) has been proven to be a reliable measure for coding aspects of couple communication and has demonstrated high levels of discriminant and concurrent validity, there is some room for human interpretation when coders observe couples' behavior and rate it on the three positive and three negative dimensions. As noted earlier, potential differences between the backgrounds of the coders and those of the study participants might result in the coders not being aware of the nuances in the various behavioral cues exhibited by the participants. The findings of this study show that partners' attachment styles influence aspects of their couple relationships. However, one reason that the relationship was not stronger may have been due to the measures used. Because the amount of criticism present was assessed by coders, there is a possibility that the findings were influenced by the fact that the coders were "outsiders" who did not know the idiosyncratic communication between two members of a couple. For example the members of a couple can be viewed as "insiders" who know each other well and may pick up on cues that their partner is being critical. In contrast, the outsiders (coders) may not notice or interpret the behaviors or content that the partner recognizes as critical behavior, which ultimately affects the responses on their H & T scale and the codes given by the coders. The coders may also interpret actions, voice tone or inflection, eye contact differently for ethnic or cultural groups of which they are not a part. The largest issue with the use of the MICS-G in this study was that the coding of criticism is part of the broader category of conflict behaviors that are coded. Therefore, the study actually examined the relationship between observed *conflict* behavior (which included forms of negative behavior in addition to criticism) on one partner's part and perceived *criticism* on the other partner's part. Perhaps a stronger

association between the two variables would have been found if there was greater correspondence between the aspects of negative interaction assessed by the two measures.

Recommendations for Future Research

Future researchers may want to use more specific measures of attachment styles that address the members of the couple experiences toward each another specifically, rather than their overall styles in relation to “other people.” Future studies also would benefit from the use of a measure of perceived criticism that includes more than one question and describes more specific and various aspects of critical behavior that is perceived in couple communication. A future study would benefit from sorting out what aspects of the partner’s communication led to the evaluation of the level critical behavior by the partner, such as the verbal and affect components. It would also be important to determine if the respondents were responding to the prompt about how critical their partner was based on the partner’s constructive or destructive criticism. In addition, the study should be replicated with non-clinical couples, as well as with a larger, more diverse sample. Partners’ levels of marital distress (e.g., assessed with the Dyadic Adjustment Scale) could be used as a control variable, as relationship distress seems likely to influence both negative communication behavior and perceived criticism. It also would be helpful to assess partners’ levels of negative attributions about each other’s intentions, as such inferences may mediate between one person’s actions and the degree to which their partner perceives the behavior as criticism. This study included analyses that tested models separately for females and males, but in the future more complex models involving both partners’ critical behavior and both partners’ perceptions of

criticism could be tested by using data analysis approaches (e.g., structural equation modeling) that take into account the non-independence of data from members of a relationship.

As there were many differences in the results for men and women it would be important for future research to explore the differences of attachment between the sexes in combination with the differences in conflict strategies, and the effects of conflict on the individuals and how attachment affects those interactions. Gender differences in how attachment is related to the sender's communication behavior could be investigated. These studies also could explore the differences in meaning for men and women about their attachment to their partner. For example, it may be that a woman who is insecurely attached may long to be attached to her partner differently where a man may be comfortable at an "insecure" attachment due to being less relationship focused.

Lastly, an important type of future research that could clarify the degree of cross-cultural validity of the MICS-G coding system would be to explore the implications of racial, ethnic, and cultural differences on coding of communication behavior. Couples from diverse backgrounds and cultures may have different expectations of couple communication and appropriate behaviors to be exhibited in partner dialogue. For example, in some cultures eye contact is a negative affect response; however in this coding system the scores on eye contact are assigned positively if that behavior is present. A future study may pair a cultural survey or interview of the individuals, assessing their cultural beliefs and expectations in communication and allowing for the control of the variable of culture in the scores. In addition, as described above, it also is important to differentiate between the more specific area of criticism and the broader

domain of conflict when assessing both observed communication behavior and partners' perceptions of each other's communication. This may require adaptations of the MICS-G coding system and/or refinement of the self-report measure of perceived criticism.

Clinical Implications

This study's findings that implicate attachment styles in partners' subjective perceptions regarding each other's communication behavior provides information that could shape new clinical interventions for couple communication problems. These findings could lead to interventions that go beyond simply changing the behavior of the speaker, but also go further to change the understanding of the receiver, as well as provide the speaker knowledge about the impact of the message on his or her partner who has a particular attachment style. The findings indicate that individuals' cognitions, as components of attachment styles, influence the amount of criticism that they perceive from their partners. The findings support the idea that the attachment styles are distinctive and have different effects on individuals, which indicates further support for this exploration of the impacts of these attachment styles on couple relationships. Given how important enacted and perceived criticism are in close relationships (Gottman, 1994), and the apparent role of attachment in moderating the link between actual and perceived criticism, these findings regarding destructive communication patterns may be a step in the direction of changing clinical therapy work with distressed couples to take attachment into account more.

In practice partners may benefit from knowing the influences that attachment styles may be having on destructive behavior and perceptions in their relationship. A clinical issue that may arise from identifying attachment factors in couple communication

problems involves the question of whether a partner's insecure attachment tendencies can best be addressed in individual therapy, or whether they can be modified through experiences in couple therapy.

In relation to the theoretical background for this study, these findings can be viewed from a cognitive behavioral therapeutic approach, as well as attachment theory. A key part of cognitive science is the term "schema" which is understood as the mental structures through which individuals filter and give meaning to internal and external events. Because attachment can be seen as a mental representation (the concept of working models), these can be assumed to be related disciplines. Therefore, it is possible that these attachment schemas, similar to other schemas can be challenged and changed through the work of cognitive-behavioral therapy (Epstein & Baucom, 2002). Since couple therapy lends itself to affecting both parts of the system, this allows for the change to occur on both parts. For example, someone who is fearfully attached can view the things the partner does as more severe or significant than a partner who is securely attached does, so the clinician can both work to change the schematic appraisal of the fearfully attached partner by changing the cognitions but also by changing the actions of the secure partner who may inadvertently be feeding into the partner's insecurities. Likewise the clinician can also work to change the cognitions of the secure partner to understand their fearful partner can allow for the growth in behavior to occur in their communication patterns and the perceiving of messages. Another widely used theoretical model, emotionally focused therapy (EFT), focuses on addressing attachment issues by changing both the views that partners have of each other and the behavioral interactions that have contributed to insecure attachment between partners. This research can lend

itself to this model's approach to therapy (Greenberg & Johnson, 1988). A core principle of EFT is that attachment is sustained by perceived responsiveness and accessibility and by emotional engagement and contact. When the availability is tentative, attachment becomes insecure and then a cycle of protest, clinging, depression and detachment occurs to become a rigid pattern on interaction (Greenberg & Johnson, 1988). The findings of this study support the work of EFT in that the results are further evidence of the impact of attachment styles on relationships and couple communication as well as the concept of the importance of the perception of each partner and the correlation to their attachment style. Therefore, since it was shown that what is perceived in a relationship is related to the person's attachment style, it further supports the work of addressing attachment issues by changing both the views that partners have of each other and the behavioral interactions that have contributed to insecure attachment between partners.

Conclusion

Despite the current study's limitations, the relationships found among couples' amounts of behavioral criticism, perceived criticism, and the moderating effects of attachment styles provide important knowledge about the communication patterns of clinical couples. It has expanded the understanding about the effects that attachment styles may have on how people perceive the communication behavior of their partner and how clinicians may better help their clients understand differences in how two partners communicate and perceive their conversations.

The findings from this research may help contribute to the development of future clinical interventions for problems in couple communication. Furthermore, this study allows clinicians to expand their knowledge about couple communication cycles to

include the important factor of perception and the impacts that attachment styles can have on perceptions.

APPENDICES: MEASURES

Appendix A
Relationship Questionnaire

RQ (ASSESSMENT)

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

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 your 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 to 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	
	1	2	3	4	5	6	7
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

COUPLE INFORMATION & INSTRUCTIONS

Appendix D

This is a first in a series of questionnaires you are being asked to complete that will contribute to the knowledge about couple therapy. In order for our research to measure progress over time we will periodically re-administer questionnaires. Please answer the questions at a relatively fast pace, usually the first that comes to mind is the best one. There are no right or wrong answers.

1. Case #: _____ 2. Therapist's(s') Code: _____ 3. Co-therapist's Code: _____ 4. Date: _____

The following information is gathered from each partner separately.

Name: (Print) _____ **Address:** _____

E-mail address: _____ zip _____

Phone Numbers: (h) _____ (w) _____
(cell) _____ (fax) _____

5. Gender: M F 6. SS# _____ 7. Age (in years) _____

8. You are coming for: a.) Family _____ b.) Couple _____ c.) Individual Therapy _____

9. **Relationship status** to person in couple's therapy with you: 10. Total Number of **Years** Together: _____

- | | |
|---|---|
| 1. Currently married, living together | a. If married , number of years married: _____ |
| 2. Currently married, separated, but not legally divorced | |
| 3. Divorced, legal action completed | |
| 4. Engaged, living together | |
| 5. Engaged, not living together | |
| 6. Dating, living together | |
| 7. Dating, not living together | |
| 8. Domestic partnership | |

11. What is your **occupation** ? _____ 12. What is your **current employment status** _____

- | | |
|--|------------------------------------|
| 1. Clerical sales, bookkeeper, secretary | 1. Employed full time |
| 2. Executive, large business owner | 2. Employed part time |
| 3. Homemaker | 3. Homemaker, not employed outside |
| 4. None – child not able to be employed | 4. Student |
| 5. Owner, manager of small business | 5. Disabled, not employed |
| 6. Professional - Associates or Bachelors degree | 6. Unemployed |
| 7. Professional – master or doctoral degree | 7. Retired |
| 8. Skilled worker/craftsman | |
| 9. Service worker – barber, cook, beautician | |
| 10. Semi-skilled worker – machine operator | |
| 11. Unskilled Worker | |
| 12. Student | |

13. Personal **yearly gross income**: \$ _____ 14. **Race**: _____
(i.e., before taxes or any deductions)

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

15. What is **your country of origin**? _____
What was **your parent's country of origin**? 16. _____ (father's) 17. _____ (mother's)
How many years have you lived in the USA? _____

18. Highest Level of **Education** Completed: _____

1. Some high school (less than 12 years)	5. Associate degree
2. High school diploma (12 years)	6. Bachelors degree (BA, BS)
3. Some college	7. Some graduate education
4. Trade School (mechanic, carpentry, beauty school, etc.)	8. Masters degree (MA, MS, etc.)
	9. Doctoral degree (PhD, MD, EDD, etc.)

--OVER PLEASE--

19. Number of people in household: _____ 20. Number of **children** who **live in home** with you: _____
 21. Number of children who **do not live** with you: _____
 Names and phone number of **contact people** (minimum 2):

22. What is your **religious** preference? _____
 1. Mainline Protestant (e.g., Episcopal, Lutheran, Methodist, Presbyterian, Unitarian)
 2. Conservative Protestant (e.g., Adventist, Baptist, Pentecostal)
 3. Roman Catholic
 4. Jewish
 5. Other(e.g., Buddhist, Mormon, Hindu)
 6. No affiliation with any formal religion

23. How often do you **participate in organized activities of a church or religious group**? _____
 1. several times per week 5. several times a year
 2. once a week 6. once or twice a year
 3. several times a month 7. rarely or never
 4. once a month

24. How **important is religion or spirituality** to you in your daily life? _____
 1. Very important 2. Important 3. Somewhat important 4. Not very important 5. Not important at all

25. **Medications:** _____ Yes _____ No If yes, please list the names, purpose, and quality of **medication(s)** you are currently taking. Also list the name and phone number of the medicating physician(s) and primary care physician:

Medications:

Primary Care Physician: _____ **Phone:** _____
Psychiatrist? Yes/No Name & Phone, if yes. _____ **Phone:** _____

Legal Involvement:
 26. A. Have you ever been involved with the police? Yes/No (circle)
 If yes, what happened? Explain: _____

27. B. Have formal, legal procedures (i.e., ex-parte orders, protection orders, criminal charges, juvenile offenses) been brought against you? Yes/No (circle)
 If yes, what happened? Explain: _____

28. If formal procedures were brought, what were the results (e.g., eviction, restraining orders?) _____

Many of the questions refer to your "family". It will be important for us to know what individuals you consider to be your family. Please list below the names and relationships of the people you will include in your responses about your family. Circle yourself in this list.

29. (Number listed in family) _____

	<u>Name</u>	<u>Relationship</u>

List the concerns and problems for which you are seeking help. Indicate which is the most important by circling it. For each problem listed, note the degree of severity by checking (✓) the appropriate column.

	4-Severe	3-Somewhat Severe	2 – Moderate	1 - Mild
30.	31.			
32.	33.			
34.	35.			
36.	37.			
38. The most important concern (circled item) is # _____				

Appendix E
Relationship Issues Survey

RIS

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

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.

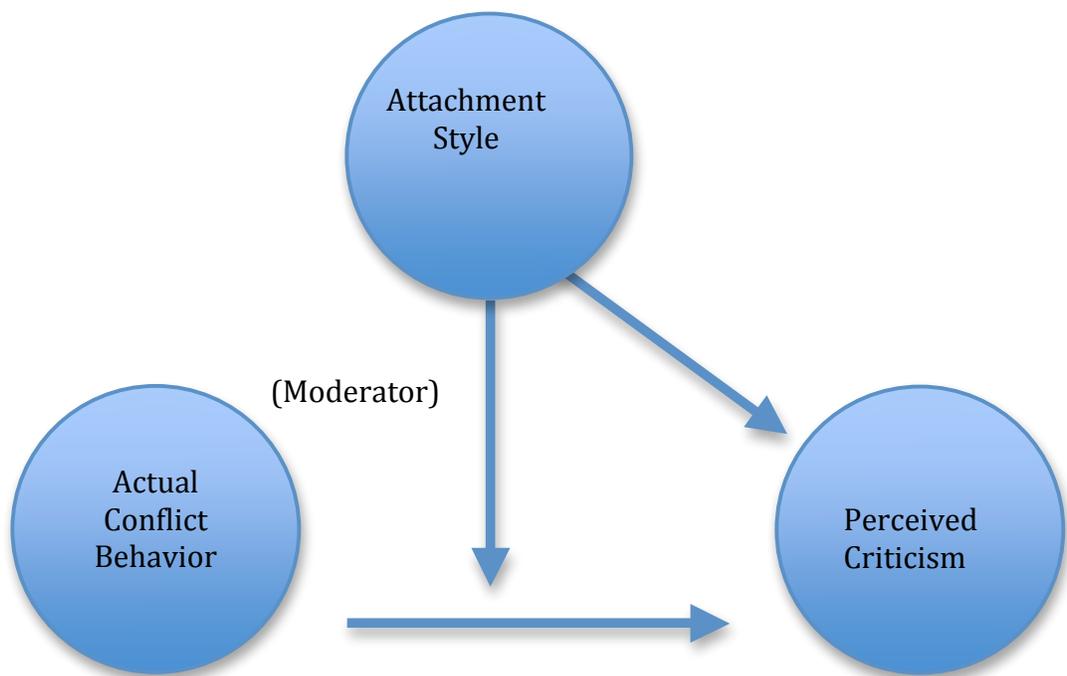
- 0 = Not at all a source of disagreement or conflict**
1 = Slightly a source of disagreement or conflict
2 = Moderately a source of disagreement or conflict
3 = Very much a source of disagreement or conflict

- | | |
|--|--|
| ____ 1. Relationships with friends | ____ 16. Leisure activities and interests |
| ____ 2. Career and job issues | ____ 17. Household tasks and management |
| ____ 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 caring and 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 | |

APPENDICIES: FIGURES

Appendix F

Figure 1: *Model of Attachment Style as a Moderator in the Relationship Between Conflict Behavior and Perceived Criticism and the Impact that Attachment Style Directly has on Perceived Criticism.*



REFERENCES

- Appel, M. A., Holroyd, K. A., & Gorkin, L. (1983). Anger and the etiology and progression of physical illness. In L. Temoshok, C. VanDyke, & L. S. Zegans (Eds.), *Emotions in health and illness: Theoretical and research foundations* (pp. 73-87). New York: Grune & Stratton.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*, 226-244.
- Baucom, D. H., & Epstein, N. (1990). *Cognitive-behavioral marital therapy*. New York: Brunner/Mazel.
- Bem, S. L. (1993). *The lenses of gender*. New Haven, CT: Yale University Press.
- Berman, W. H., Marcus, L., & Berman, E. R. (1994). Attachment in marital relations. In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 204-231). New York: Guilford Press.
- Bowlby, J. (1969). *Attachment and loss, Vol. 1: Separation*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss, Vol. 2: Separation*. New York: Basic Books.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford.
- Bruce, M. L., & Kim, K. (1992). Differences in the effects of divorce on major depression in men and women. *American Journal of Psychiatry* *149*, 914-17.
- Butner, J., Diamond, L. M., & Hicks, A. M. (2007). Attachment style and two forms of affect coregulation between romantic partners. *Personal Relationships*, *14*, 431-

455.

- Butzlaff, R. L., & Hooley, J. M. (1998). Expressed emotion and psychiatric relapse: A meta-analysis. *Archives of General Psychiatry, 55*, 547–552.
- Christensen, A., & Heavey, C. L. (1990). Gender and social structure in the demand/withdraw pattern of marital conflict. *Journal of Personality and Social Psychology, 59*, 73-81
- Cohn, D. A., Silver, D. H., Cowan, C. P., & Pearson, J. (1992). Working models of childhood attachment and couple relationships. *Journal of Family Issues, 13*, 432-449.
- Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology, 71*, 810–832.
- Cousins, P. C., & Vincent, J. P. (1983). Supportive and aversive behavior following spousal complaints. *Journal of Marriage and the Family, 45*, 678-681.
- Cushman, D. P., & Cahn, D. D. (1985). *Communication in interpersonal relationships*. Albany, NY: State University of New York Press.
- Echambadi, R., & Hess, J. D. (2007). "Mean-centering does not alleviate collinearity problems in moderated multiple regression models." *Marketing Science 26*, 438-445.
- Epstein, N. B., & Werlinich, C. A. (1999). *The relationship issues survey: A measure of areas of couple conflict*. Department of Family Science, University of Maryland, College Park.
- Epstein, N. B., & Baucom, D. H. (2002). *Enhanced cognitive-behavioral therapy for couples*. Washington, DC: American Psychological Association.

- Feeny, J. A., & Noller, P. (1996). *Adult attachment*. Thousand Oaks, CA: Sage.
- Fogel, A., & Garvey, A. (2007). Alive communication. *Infant Behavior & Development* 30, 251-257.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Gottman, J. M. (1979). *Marital interactions: Experimental investigations*. New York: Academic Press.
- Gottman, J. M. (1999). *The marriage clinic: A scientifically-based marital therapy*. New York: W. W. Norton & Co.
- Gottman, J. M., & Krokoff, L. J. (1989). Marital interaction and satisfaction: A longitudinal view. *Journal of Consulting and Clinical Psychology*, 57, 47-52.
- Gottman, J. M., Notarius, C., Gonso, J., & Markman, H. (1976). *A couple's guide to communication*. Champaign, Ill.: Research Press.
- Gottman, J. M., & Silver, N. (1994). *Why marriages succeed or fail: What you can learn from the breakthrough research to make your marriage last*. New York: Simon & Schuster.
- Greenberg, L.S., & Johnson, S.M. (1988). *Emotionally Focused Therapy for Couples*. New York: Guilford Press.
- Griffin, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Vol. 5. Attachment processes in adulthood* (pp. 17–52). London: Jessica Kingsley.
- Guyll, M., Cutrona, C., Burzette, R., & Russell, D. (2010). Hostility, relationship quality,

- and health among African American couples. *Journal of Consulting and Clinical Psychology, 78*, 646-654.
- Halford, W. K., Osgarby, S., & Bouma, R. (2000). Rapid Kategoriensystem für Partnerschaftliche Interaktion (Rapid-KPI) coding manual. Unpublished manuscript, Griffith University.
- Hazan, C., & Shaver, P. (1987). Conceptualizing romantic love as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.
- Heyman, R. E. (2001). Observation of couple conflicts: Clinical assessment applications, stubborn truths, and shaky foundations. *Psychological Assessment, 13*, 5-35.
- Heyman, R. E. (2004). Rapid Marital Interaction Coding System. In P. K. Kerig & D. H. Baucom (Eds.) *Couple observational coding systems* (pp. 67-94). Mahwah, NJ: Lawrence Erlbaum.
- Holmes, J. G., & Murray, S. L. (1996). Conflict in close relationships. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 622–654). New York: Guilford Press.
- Hooley, J. M., & Teasdale J. D. (1989). Predictors of relapse in unipolar depressives: Expressed emotion, marital distress, and perceived criticism. *Journal of Abnormal Psychology, 98*, 229-235.
- Jacobson, N., & Margolin, G. (1979). *Marital therapy*. New York: Brunner/Mazel.
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, methods, and research. *Psychological Bulletin, 118*, 3-34.
- Kerig, P. K., & Baucom, D.H. (Eds.) (2004). *Couple observational coding systems*.

Mahwah, NJ: Lawrence Erlbaum.

Klein, R. A., & Milardo, R. (2000). The social context of couple conflict: Support and criticism from informal third parties. *Journal of Social and Personal Relationships, 17*, 618-637.

Kobak, R. R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. *Journal of Personality and Social Psychology, 60*, 861–869.

Locke, H. J., & Wallace, K. M. (1959). Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living, 21*, 251-255.

Margolin, G., & Wampold, B. E. (1981). Sequential analysis of conflict and accord in distressed and nondistressed marital partners. *Journal of Consulting and Clinical Psychology, 49*, 554-567.

Markman, H. J. (1981). Prediction of marital distress: A 5-year follow-up. *Journal of Consulting and Clinical Psychology, 49*, 760-762.

Miklowitz, D. J. (1995). The evolution of family-based psychopathology. In R. H. Mikesell, D. D. Lusterman, & S. H. McDaniel (Eds.) *Integrating family therapy: Handbook of family psychology and systems theory* (pp. 183-197). Washington, DC: American Psychological Association.

Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion, 27*, 77-102.

Murphy, B., & Bates, G. W. (1997). Adult attachment style and vulnerability to depression. *Personality and Individual Differences, 22*, 835–44.

- Murphy, C. M., & Hoover, S. A. (2001). Measuring emotional abuse in dating relationships as a multifactorial construct. In O'Leary, D. K., & Maiuro, R. D. (Eds.), *Psychological abuse in violent domestic relations* (pp. 39-53). New York: Springer.
- Oggins, J., Veroff, J., & Leber, D. (1993). Perceptions and marital interactions among Black and White newlyweds. *Journal of Personality and Social Psychology*, *65*, 494-511.
- Overall, N. C., Fletcher, G. J., Simpson, J. A., & Sibley, C. G. (2009). Regulating partners in intimate relationships: The costs and benefits of different communication strategies. *Journal of Personality and Social Psychology*, *96*, 620-639.
- Parr, P., Boyle, R. A., & Tejada, L. (2008). I said, You said: A Communication exercise for couples. *Contemporary Family Therapy*, *30*, 167-173.
- Pearce, Z. J., & Halford, W. K. (2008). Do attributions mediate the association between attachment and negative couple communication? *Personal Relationships*, *15*, 155-170.
- Peterson, K. M., & Smith, D. A. (2010). To what does perceived criticism refer? Constructive, destructive and general criticism. *Journal of Family Psychology*, *24*, 97-100.
- Pistole, M. C. (1989). Attachment in adult romantic relationships: Style of conflict resolution and relationship satisfaction. *Journal of Social and Personal Relationships*, *6*, 505-510.
- Pistole, M. C., & Arricale, F. (2003). Understanding attachment: Beliefs about conflict.

Journal of Counseling and Development, 81, 318-328.

Prigerson, H. G., Maciejewski, P. K., & Rosenheck, R. A. (1999). The effects of marital dissolution and marital quality on health and health service use among women.

Medical Care, 37, 858-873.

Rehman, U. S., & Holtzworth-Munroe, A. (2007). A cross-cultural examination of the relation of marital communication behavior to marital satisfaction. *Journal of Family Psychology, 21, 759-763.*

Renshaw, K. D. (2006). *Measurement of perceived criticism: Differentiating between specific and general perceptions and between constructive and destructive criticism.* Poster session presented at the Association for Behavioral and Cognitive Therapies Annual Convention, Chicago.

Renshaw, K. D. (2008). The predictive, convergent, and discriminant validity of perceived criticism: A review. *Clinical Psychology Review, 28, 521-534.*

Riso, L. P., Klein, D. N., Anderson, R. L., Ouimette, P. C., & Lizardi, H. (1996).

Convergent and discriminant validity of perceived criticism from spouses and family members. *Behavior Therapy, 27, 129-137.*

Schaap, C. P. D. R. (1984). Conflict resolution and marital satisfaction. *Nederlands*

Tijdschrift voor de Psychologie en Haar Grensgebieden, 39, 396-403.

Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns. *Personal Relationships, 1, 23-43.*

Schrodt, P., Witt, P. L., & Messersmith, A. S. (2008). A meta-analytical review of family communication patterns and their associations with information

- processing, behavioral, and psychosocial outcomes. *Communication Monographs*, 3, 248-269.
- Smith, T. W., Glazer, K., Ruiz, J. M., & Gallo, L. C. (2004). Hostility, anger, aggressiveness, and coronary heart disease: An interpersonal perspective on personality, emotion, and health. *Journal of Personality*, 72, 1217–1270.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15–28.
- Spence, J. T., & Helmreich, R. L. (1978). Masculinity and femininity: Their psychological dimensions, correlates, and antecedents. Austin: University of Texas Press.
- Sperling, M. B., & Berman, W. H. (1994). The structure and function of adult attachment. In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 3-28). New York: Guilford Press.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17, 283-316.
- Tannen, D. (1990). *You just don't understand: Women and men in conversation*. New York: Morrow.
- Walt, T., Kramer, S., & France, J. (2001). Communication, language and mental illness. In J. France and S. Kramer (Eds.), *Communication and mental illness: theoretical and practical approaches* (pp. 101-109). London: Jessica Kingsley Publishers.
- Weeks, G. R., & Treat, S. R. (2001). *Couples in treatment: Techniques and approaches for effective practice* (2nd ed.). Philadelphia, PA: Brunner-Routledge.

- Weiss, R. L. (1980). Strategic behavioral marital therapy: Toward a model for assessment and intervention. In J. P. Vincent (Ed.), *Advances in family intervention, assessment and theory* (Vol. 1, pp.229-271). Greenwich, CT: JAI Press.
- Weiss, R. L., & Summers, K. (1983). The Marital Interaction Coding System III. In E. E. Filsinger (Ed.), *Marriage and family assessment: A sourcebook for family therapists* (pp. 85-115). Beverly Hills, CA: Sage Publications.
- Weiss, R. L., & Tolman, A. O. (1990). The Marital Interaction Coding System-Global (MICS-G): A global companion to the MICS. *Behavioral Assessment, 12*, 271-294.