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ABSTRACT

Title of Document:

**EXPANDING INTIMACY THEORY:
VULNERABLE DISCLOSURES AND PARTNER
RESPONDING**

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Doctor of Philosophy, 2018

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Background: Intimacy – a sense of closeness between individuals – is a fundamental component of healthy relationships and promotes mental and physical health. Theorists agree that intimacy increases when individuals' vulnerable disclosures are met with partners' supportive responses. The present research expands theory by examining two qualities of vulnerable disclosures that may alter their function within intimacy processes: 1) the extent to which the disclosure includes/implicates the partner; and 2) the extent to which the disclosure describes specific, rather than general, thoughts and emotions. Additionally, this research examines emotion-regulatory factors (i.e., attachment style and mindfulness) that may influence the expanded model.

Methods: Eighty-two cohabiting couples first completed questionnaires of emotion-regulation styles, then participated in two randomly assigned video-recorded vulnerability discussions (either partner-inclusive or exclusive), and finally rated how responsive, reinforcing, and punishing their partner was during each discussion.

Hypotheses were tested with multilevel modeling.

Results: Individuals perceived lower responsiveness and reinforcement and higher punishment when disclosing specific, partner-inclusive vulnerabilities. Regarding attachment style, women perceived less responsiveness during partner-inclusive disclosures when men had higher avoidant attachment (but not lower). Both men and women perceived lower reinforcement during specific disclosures when their partners had higher avoidant attachment (but not lower). Regarding mindfulness, individuals perceived lower responsiveness when disclosing specific, partner-inclusive vulnerabilities when their partners had lower mindfulness (but not higher). Finally, individuals perceived lower reinforcement when disclosing specific vulnerabilities when their partners had lower mindfulness (but not higher).

Conclusions: This research expands intimacy theories by illuminating two qualities of vulnerable disclosures that influence intimacy process outcomes – partner-inclusiveness and specificity. Further, attachment style and mindfulness may be important emotion-regulation factors to assess and potentially modify to promote couple cohesiveness. Theoretical and clinical implications are discussed.

EXPANDING INTIMACY THEORY: VULNERABLE DISCLOSURES AND
PARTNER RESPONDING

By

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Table of Contents

Acknowledgements	ii
Table of Contents	iii
List of Tables	v
Introduction.....	1
Literature Review	3
Intimacy	3
Intimacy and Individual Functioning.....	4
Intimacy and Relationship Functioning	5
Process Models of Intimacy.....	6
Interpersonal Process Model of Intimacy.....	7
Support for Interpersonal Process Model of Intimacy.....	8
Behavioral Interpretation of Intimacy	12
Support for a Behavioral Interpretation of Intimacy.....	14
Comparison and Integration of Models.....	14
Attachment Theory and Intimacy	18
Attachment Styles and Intimacy Processes.....	20
Partner-Inclusiveness during Vulnerable Disclosures	25
Partner-Inclusive Vulnerable Disclosures and Partner Responding	30
Hurtful Events and Partner Responding.....	31
Specificity and Partner Responding	32
Attachment Theory and Partner Responding	34
Mindfulness and Partner Responding.....	37
Overview of the Current Study.....	42
Specific Aims of the Proposed Research.....	42
Specific Aim 1	42
Expansion of Intimacy Process Theory.....	42
Specific Aim 2	43
Emotion regulation and Intimacy Process Theory.....	43
Research Design and Method	44
Participants.....	44
Procedures	47
Measures	49
Demographic Items	49
Perceived Partner Responsiveness.....	49
Perceived Partner Reinforcing and Punishing Behaviors.....	50
Adult Attachment Style.....	51
Mindfulness.....	53
Observational Coding	54
Vulnerability Coding System	55

Specificity Coding	58
Vulnerability Manipulation Check	60
Results	61
Preliminary Analyses	61
Descriptive Analyses	61
Analytic Strategy	65
Primary Analyses	69
Discussion	89
Interpretation of Results.....	90
Summary of Findings.....	98
Strengths and Limitations	100
Theoretical and Clinical Implications	105
Conclusions and Future Directions	111
Appendices	113
References	124

List of Tables

Table 1. Demographics	46
Table 2. Means and Standard Deviations	61
Table 3. Correlations	64
Table 4. Test of distinguishability	65
Table 5. Partner-inclusiveness and specificity predicting perceived partner responsiveness	61
Table 6. Partner-inclusiveness and specificity predicting perceived partner reinforcement	70
Table 7. Partner-inclusiveness and specificity predicting perceived partner punishment.....	72
Table 8. Partner-inclusiveness, specificity, and partner attachment style predicting perceived partner responsiveness.....	75
Table 9. Partner-inclusiveness, specificity, and partner attachment style predicting perceived partner reinforcement	78
Table 10. Partner-inclusiveness, specificity, and partner attachment style predicting perceived partner punishment	81
Table 11. Partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner responsiveness.....	83
Table 12. Partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner reinforcement	85
Table 13. Partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner punishment	88

List of Figures

Figure 1. Integrated Model of Intimacy	17
Figure 2. Interaction between partner-inclusiveness and specificity predicting perceived partner responsiveness	71
Figure 3. Interaction between partner-inclusiveness and specificity predicting perceived partner reinforcement	64
Figure 4. Interaction between partner-inclusiveness and specificity predicting perceived partner punishment	72
Figure 5. Interaction between partner-inclusiveness, specificity, and partner attachment style predicting perceived partner responsiveness	76
Figure 6. Interaction between partner-inclusiveness, specificity, and partner attachment style predicting perceived partner reinforcement	79
Figure 7. Interaction between partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner responsiveness	83
Figure 8. Interaction between partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner reinforcement	86

Introduction

Intimacy is one form of human connection and is a fundamental component of healthy relationships (e.g., Prager, 1995; Reis & Shaver, 1988) and mental and physical well-being (e.g., Pietromonaco, Uchino, & Dunkel Schetter, 2013; Uchino, 2009). Theorists agree that intimacy increases when individuals self-disclose personal thoughts or feelings and partners are understanding and supportive (Cordova & Scott, 2001; Reis & Shaver, 1988). Research generally supports aspects of intimacy process theories; however, current theories do not delineate *qualities* of vulnerable disclosures that may impact intimacy processes.

The present research expands intimacy process theory by examining two such qualities of vulnerable disclosures: 1) the extent to which the disclosure includes or implicates the partner (i.e., partner-inclusiveness); and 2) the extent to which the disclosure describes specific, rather than general, thoughts and feelings (i.e., specificity). Vulnerable disclosures that are partner-exclusive (i.e., do not include or implicate the partner; such as talking about a difficult work experience) are likely to elicit high partner responsiveness and promote intimacy (e.g., Roberts & Greenberg, 2002). These disclosures communicate trust and desire to connect (e.g., Reis & Shaver, 1988).

In contrast, vulnerable disclosures that are partner-inclusive (i.e., include or implicate the partner; such as talking about the betrayal an individual feels when his or her partner lies) may not. Attachment theory and research on relationship transgressions suggest that discussions of hurtful relationship events elicit feelings of sadness, fear, anxiety, and anger (Fitness, 2001; Leary & Springer, 2001; Vangelisti

& Young, 2000). Therefore, vulnerable discussions that are more partner-inclusive may elicit similar feelings and serve to decrease intimacy due to partner defensiveness (Makinen & Johnson, 2006) and the inclination to attend to one's own feelings of discomfort rather than the partner (Fraley & Shaver, 2000). Disclosures that implicate the partner should make both the discloser and the partner feel vulnerable— making the discussion more difficult to navigate and leading to lower partner responsiveness. Further, disclosures that reveal specific feelings and experiences evoke more vulnerability from the discloser and, in turn, stronger emotion in the responder. Patterns of responding (or lack of responsiveness) should therefore be stronger during discussions with higher specificity compared to those that are more general.

However, research has shown that some individuals are able to remain engaged during difficult relationship discussions due to the emotion regulation strategies of secure attachment and mindfulness (Khalifian & Barry, 2016). Due to the distress and vulnerability caused by partner-inclusive disclosures, individuals with these emotion regulation strategies should be more responsive compared to individuals with insecure attachment or lower mindfulness.

Responding supportively to vulnerable disclosures is important for increasing intimacy and promoting comfort with future disclosures; however, no research has examined whether *qualities* of vulnerable disclosures influence partner responding. Therefore, the present research proposes an expanded intimacy process model that includes important qualities of vulnerable disclosures and individual differences in emotion regulation thought to impact responding patterns.

Literature Review

Intimacy

Interpersonal relationships are critical for mental and physical health (e.g., Berkman, Glass, Brissette, & Seeman, 2000; Cohen, 2004; Pietromonaco, Uchino, & Dunkel Schetter, 2013; Uchino, 2009), effective emotion regulation, and survival (Beckes & Coan, 2011; Bowlby, 1973/1980/1982). The desire to have meaningful connections with others is considered a critical component of being human (Ryff & Singer, 2000). Indeed, some suggest that true fulfillment in life stems from giving and receiving love (Russell, 1930). Given humans' strong desire to connect to others, and the necessity of connection for health and survival, researchers suggest that intimate connection is considered a universal need (Laurenceau, Rivera, Schaffer & Pietromonaco, 2004; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

Intimacy is one aspect of human connection and is broadly defined as a sense of closeness between individuals. Intimacy can be characterized as a state (i.e., level of intimacy in a relationship) and as a process (i.e., the development of intimacy). Detailed summaries of intimacy processes are presented later. Generally speaking, however, intimacy process models emphasize studying specific interactions (Cordova & Scott, 2001; Prager, 1995; Reis & Shaver, 1988) between individuals in which one partner expresses self-relevant thoughts, emotions, or feelings and, as a result of the partner's acceptance and support, the individual feels validated and understood (Cordova & Scott, 2001; Laurenceau, Feldman Barrett, & Pietromonaco 1998; Reis & Shaver, 1988). Intimate interactions may involve verbal self-disclosures or physical expressions of feelings and vulnerability, such as hugging, kissing, and sexual

activity. These physical forms of intimate expression can similarly create an avenue for intimacy when the partner is responsive and communicates acceptance and love (e.g., Prager, 1995; Reis & Patrick, 1996). The development of intimacy results from an accumulation of these exchanges and is an interactive process that leads to feelings of emotional safety, closeness, and a desire to engage in intimate interactions in the future (Cordova & Scott, 2001; Reis & Shaver, 1988).

Intimacy and Individual Functioning

Physical and emotional forms of intimacy contribute to positive mental and physical health and lack of intimacy negatively impacts these outcomes. According to social baseline theory (SBT) (Beckes & Coan, 2011), humans require social connection in order to regulate emotion and function optimally throughout life. That is, people are at their baseline emotional and physical functioning when they are physically and psychologically connected with others. This is evidenced by research showing that neural circuits associated with the emotion regulation of emotion are actually *less active* when receiving social support. For example, when anticipating a shock, women have reduced activation in the neural systems (i.e., hypothalamus, anterior cingulate cortex, and dorsolateral prefrontal cortex) that support emotional threat response when they are able to hold a partner's hand (Coan, Schaefer, & Davidson, 2006). Similarly, patients with fibromyalgia report less pain and exhibit decreased hemodynamic response when stimulated in a painful area when their significant other is present compared to when they are alone (Montoya, Larbig, Braun, Preissi, Birbaumer, 2004). When humans are in contact with others, the brain is less aroused and less watchful for risk because it is within the context (i.e., close

human proximity) for which it innately developed. Moreover, the reduction of arousal and hypervigilance associated with social connection depends upon the quality of the relationship. When individuals are in contact with partners with whom they experience more intimacy, they experience better emotional and physical emotion regulation (Coan et al., 2006).

Intimacy supports this innate requirement for human contact and promotes optimal individual functioning. For example, men who experience higher intimacy in their relationships have less stress and lower feelings of uncertainty and women experience greater happiness and life satisfaction (McAdams & Bryant, 1987). Whereas positive human connection predicts optimal individual functioning, lack of intimacy predicts loneliness (Ron & Lowenstein, 1999; Wheeler, Reis, and Nezlek, 1983) and mental illness (e.g., depression; Chelune & Waring, 1984; Waring & Patton, 1984). Additionally, intimacy has been shown to buffer the detrimental effects of events that are particularly difficult for couples to navigate, including difficult pregnancies (Hobfoll & Lieberman, 1987) and the serious illness of a child (Hobfoll & Lerman, 1988).

Intimacy and Relationship Functioning

In addition to benefiting individual functioning, intimacy is important for relationship functioning. Couples who experience higher intimacy, compared to those with lower intimacy, have more positive and effective communication (Theiss & Solomon, 2006) and are better equipped to work through challenges arising in their relationships. Couples who experience higher intimacy are more likely to show concern for one another, collaboratively negotiate, and seek support when dealing

with disagreements (Sanderson & Karetzky, 2002) while those with lower intimacy are at increased risk for conflict and have more difficulty resolving disagreements (Roberts & Greenberg, 2002). According to the intimacy process model of marital dysfunction, a decline in relationship satisfaction stems first from the absence of intimate interactions rather than an increase in conflict. A relationship characterized by limited intimacy perpetuates an environment in which conflict is more likely to occur and more difficult to resolve (Roberts & Greenberg, 2002). Guerrero, Jones, & Burgoon (2000) manipulated non-verbal expressions of intimate behaviors (e.g., facial expression, attentiveness, and body positioning) by instructing one partner to increase or decrease their typical level of intimacy expression during couples' laboratory discussions of relationship issues. They found that lack of displays of intimacy in one partner is likely to perpetuate distance and hostility in the other. The development of intimate connection is considered a fundamental component of romantic relationships (e.g., Peplau & Gordon, 1985; Reis, 1990), and the absence of intimacy may perpetuate an atmosphere of disconnection and insecurity in which conflict is more likely to occur, resulting in relationship dissolution (Roberts & Greenberg, 2002; Barry, Lawrence, & Langer, 2008).

Process Models of Intimacy

There are two process models of intimacy. These models tend to emphasize self-disclosure of thoughts or feelings, partner responsiveness, and perceived partner responsiveness (Cordova & Scott, 2001; Reis & Shaver, 1988). The most widely known process model of intimacy is the interpersonal process model of intimacy (Reis & Shaver, 1988). A second model is a behavioral interpretation of intimacy,

proposed by Cordova and Scott (2001), and it conceptualizes intimate connection as a series of behaviors that either reinforce or punish intimacy development.

Interpersonal Process Model of Intimacy

The interpersonal process model of intimacy (Reis and Shaver, 1988) characterizes the development of intimacy as a process that includes self-disclosure, partner responsiveness, and perceived partner responsiveness. Intimacy is increased when an individual self-discloses personal thoughts or emotions, the partner responds attentively and supportively, and the partner's response is perceived by the discloser as validating and caring. Factors that influence disclosure, partner responsiveness, and perceived partner responsiveness include interpersonal insecurities, needs, and goals. For ease of explanation, the individual disclosing personal thoughts, emotions, and feelings will be referred to as the discloser and the partner will be referred to as the responder. The intimacy process begins when the discloser shares thoughts or emotions of personal relevance. Willingness to share personal information is influenced by the discloser's security in the relationship and relationship goals (e.g., the level of closeness the person wants to create). Disclosures that are likely to increase intimacy are those that reveal emotional vulnerability that the discloser considers private and would only share with trusted others. Willingness to expose personal thoughts, feelings, and emotions communicates trust and a desire to connect (Reis and Shaver, 1988). Revealing personally vulnerable secrets and experiences about the innermost-self provides the partner with an opportunity to validate, support, and accept the discloser, thus facilitating closeness (Laurenceau et al., 1998).

The next component of the interpersonal process model of intimacy is partner responsiveness. How the responder replies to the individual's disclosure is similarly influenced by the responder's interpersonal insecurities and goals for the relationship. Responsiveness is characterized as behavior, either verbal or nonverbal, which communicates that the person is attentive, understands, and supports the discloser. Examples of responsiveness include making eye contact, physically touching the discloser in a way that communicates empathy and compassion, and/or verbally expressing support, warmth, and consideration. When partners are responsive and supportive following a disclosure, intimacy increases (Prager, 1995; Reis & Patrick, 1996); when partners are unresponsive or insensitive to self-disclosure, intimacy is greatly reduced (Laurenceau, Feldman Barrett, and Pietromonaco; 1998).

The last component of intimacy processes is the discloser's perception of partner responsiveness. In order for intimacy to increase, the discloser must perceive the responder's empathy, understanding, and validation. This final component is called *perceived partner responsiveness* and is arguably the most critical factor contributing to the discloser's feelings of intimacy (Lin, 1992; Reis & Shaver, 1988). Reis and Shaver (1988) argue that the partner may attempt to be responsive; however, if the discloser does not interpret their attempt as genuinely supportive and understanding of his or her needs or experiences than the discloser is unlikely to experience intimacy.

Support for Interpersonal Process Model of Intimacy

Research generally supports the interpersonal process model of intimacy. Laurenceau, Feldman Barrett, and Pietromonaco (1998) used a diary procedure to

conduct two studies in which undergraduate students completed self-report measures of self-disclosure and partner disclosure (i.e., the individual's perception of how much the other person disclosed), perceived partner responsiveness, and their experience of intimacy over a period of one to two weeks. Participants recorded all social interactions lasting longer than 10 minutes, not just those with romantic partners, in which they felt they attended to the other person and were engaged in the discussion. Results revealed that self-disclosure and partner disclosure each predicted subjective intimacy for a given interaction and perceived partner responsiveness partially mediated the relation between self-disclosure and intimacy. Additionally, the authors examined types of disclosures and, consistent with theory, found that disclosures that were characterized by expressions of emotions were more strongly predictive of intimacy compared to disclosures of more general facts. These findings support the interpersonal process of intimacy and suggest that emotional disclosures, compared to factual disclosures, more strongly contribute to feelings of intimacy (Lin, 1992; Reis & Shaver, 1988).

More recently, Laurenceau, Feldman Barrett, and Rovine (2005) examined the interpersonal process model of intimacy using a married sample. For 42 consecutive days, both partners completed measures in daily diaries examining self and partner disclosure, perceived partner responsiveness, and feelings of intimacy. Self-disclosure and partner disclosure predicted feelings of intimacy for both husbands and wives. The relation between self-disclosure and intimacy was stronger for husbands compared to wives. Perceived partner responsiveness partially mediated the association between self-disclosure and intimacy and partner disclosure and intimacy

for husbands and wives, and the path from perceived partner responsiveness and intimacy was stronger for women compared to men.

The interpersonal process model of intimacy has also been examined with couples experiencing health related stressors. Manne and colleagues (2004) examined the model with a sample of breast cancer patients and their partners. Couples participated in two laboratory discussions of either a marital issue or a cancer related issue. Two models were examined, one for cancer patients and one for their partner, in which perceived partner responsiveness mediated the association between self and partner disclosure and feelings of intimacy during the discussion. For cancer patients, partner responsiveness partially mediated the relation between partner disclosure and intimacy. Self-disclosure was not related to partner responsiveness or intimacy for cancer patients. For the partners, partner responsiveness mediated the relation between self-disclosure and intimacy and partner disclosure and intimacy. Findings for the partner support the interpersonal process model of intimacy— perceived partner responsiveness mediated the association between self-disclosure and responsiveness. However, for the patient, self-disclosure did not predict perceived partner responsiveness or intimacy. Rather, partner disclosure predicted feelings of intimacy and was partially mediated by perceived partner responsiveness. The authors suggest that these findings may be due to gender (i.e., women feel closer when their partners disclose) or situation (i.e., healthy partner disclosure is more predictive of intimacy for the cancer patient).

Bois, Bergeron, Rosen, Mayrand, Brassard, and Sadikaj (2016) examined aspects of the intimacy process with women diagnosed with vulvodynia—a

vulvovaginal pain condition—and their spouses. During a laboratory interaction, the couples discussed how vulvodynia had influenced their lives. Higher partner disclosure was associated with lower sexual distress and higher sexual satisfaction for women and their partners. Higher perceived partner responsiveness was associated with lower sexual distress and higher sexual satisfaction for women and their partners. Additionally, individuals whose partner perceived them as more responsive, experienced greater sexual satisfaction. Higher participant responsiveness, rated by observers, predicted greater sexual satisfaction and lower sexual distress for couples. This research suggests that components of the interpersonal process model of intimacy (e.g., self-disclosure and perceived partner responsiveness) contribute to feelings of physical intimacy (e.g., sexual satisfaction) for individuals struggling with a health issue that impact sexual intimacy.

In sum, research on the interpersonal process model of intimacy has varied regarding type of sample (e.g., friend pairs, romantic partners, and participants with health issues) and methodology (e.g., self-reports of all interactions occurring over a period of time, daily diaries, and video-tapped interactions). Findings generally support pieces of the interpersonal process model of intimacy with regard to self-disclosure and higher perceived partner responsiveness increasing feelings of intimacy. Findings suggest that certain aspects of intimacy processes may function differently for men compared to women and under different conditions (i.e., cancer patient's discussions). For example, a man's self-disclosure generally predicts his own feelings of closeness whereas a man's responsiveness generally predicts his partner's feelings of intimacy (Laurenceau, Feldman Barrett, & Pietromonaco, 1998;

Laurenceau, Feldman Barrett, & Rovine, 2005). For cancer patients, self-disclosure was not related to their own feelings of intimacy, rather the partner's disclosure predicted their feelings of intimacy. Studies examining different types of discussions (e.g., marital issues versus cancer related issues) have not examined how proximal outcomes of intimacy processes (e.g., responsiveness) change depending on the discussion. For example, Manne and colleagues (2004) did not examine whether partners were more or less responsive when discussing their marital issue compared to their cancer related issue. Learning which types of discussions evoke responsiveness or present challenges to responsiveness will provide important insights for recommendations in navigating different kinds of discussions. Thus, research suggests that self-disclosure and perceived partner responsiveness are important components of intimacy development; however, more research is needed to determine whether qualities of discussions influence intimacy processes.

Behavioral Interpretation of Intimacy

A second intimacy process model proposes that intimacy is developed during interpersonal interactions when expressions of vulnerability — behavior that is at risk of punishment — are reinforced rather than punished¹ by the responder (Cordova & Scott, 2001). Vulnerable disclosures are often quite emotional and involve sharing personal feelings of hardship, discomfort, or pain. A disclosure is considered vulnerable, or at risk of punishment, to the extent that the behavior has been met with punishment in the past. For an interaction to create feelings of vulnerability, the

¹ Based on behavior theory, reinforcement is any consequence of a behavior that makes the behavior more likely to occur in the future and punishment is any consequence of a behavior that makes the behavior less likely to occur in the future. Thus, reinforcement is not necessarily positive or enjoyable and punishment is not necessarily negative or aversive.

discloser may have experienced punishment either directly or indirectly. For example, the discloser may have been directly criticized for sharing personal feelings regarding an incident, or the discloser may have witnessed someone close to him or her being criticized for the same type of disclosure. Punishment of vulnerable disclosures can occur many different ways. For example, a responder may embarrass the discloser for sharing vulnerability or criticize and denigrate the discloser. Reinforcement occurs when a listener validates, supports, or shows understanding in some way. The listener can show support either verbally or nonverbally by saying that he or she understands and can empathize or by sharing a supportive gaze or touch. Additionally, vulnerable disclosures can be negatively reinforced. If the discloser shares a vulnerability that has been punished in the past, the experience of disclosing without ridicule can be negatively reinforcing to the discloser (Cordova & Scott, 2001). When the discloser shares vulnerability and experiences no criticism (when it has existed in the past) the expectation of hurt is removed and the discloser feels a sense of relief and a decrease in anxiety and fear associated with sharing vulnerability, and is more likely to disclose in the future. When vulnerable disclosures are reinforced, rather than punished, individuals are more comfortable disclosing and feelings of intimate safety (i.e., a sense of comfort and safety being vulnerable with one's partner) increase. Alternatively, if vulnerable disclosures are punished by the responder (e.g., criticized, met with hostility, or shamed) individuals will be less likely to disclose vulnerability in order to protect themselves, leading to fewer opportunities to experience intimacy.

Support for a Behavioral Interpretation of Intimacy

Only one study has been conducted examining components of Cordova and Scott's (2001) behavioral conceptualization of intimacy. LaMotte, Khalifian, and Barry (2016) examined how couples' perceptions of reinforcing and punishing behaviors during conflict influence feelings of intimacy over a six-month period. Intimate safety was assessed at the first time point and then, one year later, couples returned to the laboratory and completed measures of current feelings of intimate safety and reinforcing behaviors (i.e., understanding one another's viewpoint) and punishing behaviors (i.e., criticizing and blaming) that had occurred during conflict interactions over the previous 6 months. Results generally supported the model. Perceiving a partner's behaviors as reinforcing (e.g., carefully listening and making the speaker feel that his/her viewpoint is valuable) predicted increases in intimacy for women. Perceiving a partner's behaviors as punishing (e.g. criticism and blame) during conflict predicted decreases in intimacy for men and women. These findings support Cordova and Scott's (2001) theory that the development of intimate safety is not only dependent on supportive responses of a partner. Rather, punishment of vulnerability is also important. These findings are in line with previous research that has found that negative interactions may exude a more deleterious effect compared to the benefits of positive interactions (Gottman, 1994).

Comparison and Integration of Models

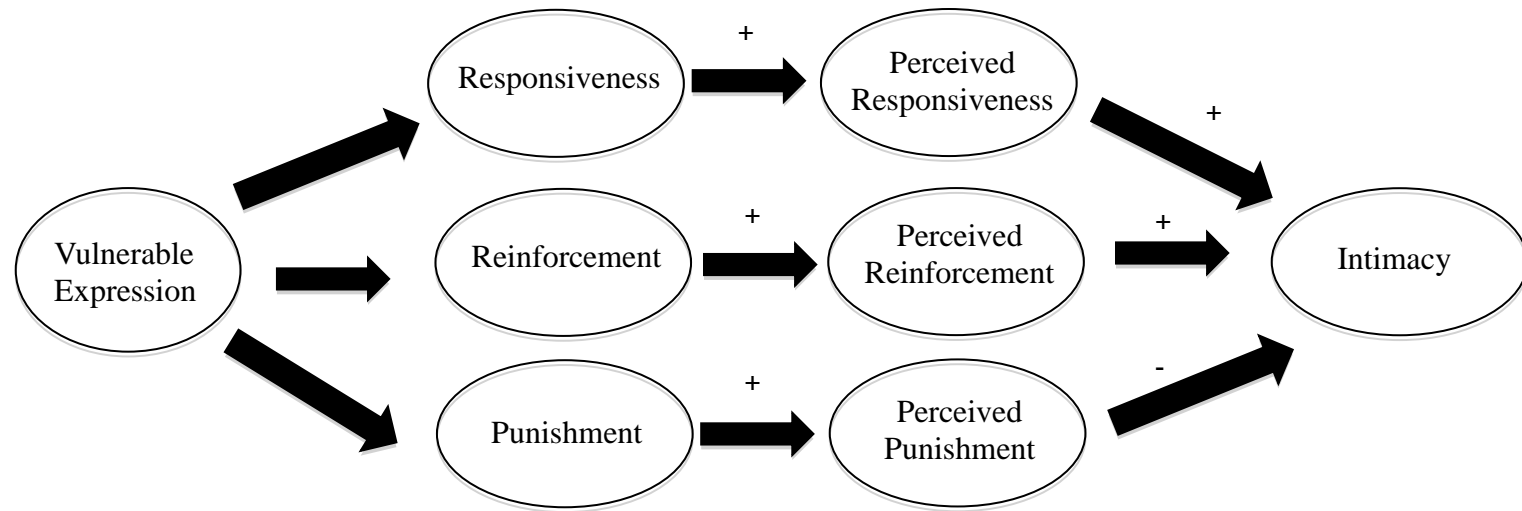
The interpersonal process model of intimacy (Reis & Shaver, 1988) and Cordova and Scott's (2001) behavioral conceptualization of intimacy share many similarities and have important differences. Therefore, an integration of the two

models and examination of all components provides a more complete understanding of the intimacy process. Both models propose that self-disclosures, met with responsiveness, lead to increased feelings of intimacy. Expanding upon this model, Cordova and Scott highlight the importance of vulnerability and that, although expressions of vulnerability are most often verbal, they can also be physical. For example, one partner may initiate sexual activity during a time when sexual engagement has been challenging. If the partner criticizes the individual for initiating sex, that individual will feel a decrease in intimate safety. Perhaps the largest difference between the two models, Cordova and Scott emphasize the impact of punishing responses leading to decreases in feelings of intimacy. In the example above, the partner criticized the individual for initiating sex— leading to a decrease in intimate safety. Additionally, Cordova and Scott (2001) suggest that lack of responsiveness may actually be reinforcing for an individual who has experienced criticism in the past. For example, in a new relationship, the individual above may disclose that a past partner criticized him for initiating sex. In reaction to this disclosure, the new partner talks about the trip they have planned for tomorrow and says that she is excited to get away for the weekend. She may have changed the subject for many reasons (e.g., she felt uncomfortable, she didn't want to think about his past relationships, she became angry, she doesn't care); however, the fact that she didn't respond may have actually been reinforcing because the experience of no response, and her changing the subject, felt much more comfortable than the criticism he had experienced in the past. In sum, both models emphasize the importance of

disclosure and responsiveness and Cordova and Scott (2001) include the negative impact of punishing responses.

A model of intimacy that integrates both theories would include responsiveness, reinforcement, and punishment (and the perception of those responses) as important components of the intimacy process (see Figure 1). By integrating both models, vulnerable disclosure can be any form of verbal or behavioral expression of vulnerability. Responsiveness is described as showing understanding and acceptance for that vulnerability. Reinforcement is any behavior (or lack of behavior) that reinforces the disclosure. For example, it would undoubtedly be reinforcing to hear validation for a vulnerable disclosure. It would also be reinforcing if there were a lack of criticism when criticism had occurred in the past. Finally, the model includes punishment, which has a negative relation with intimacy. If vulnerable expression is belittled or denigrated then intimacy is likely to decrease. The discloser's perception of these responses is based on the actual behavior. Importantly, the discloser must perceive the behaviors are responsive, reinforcing, and not punishing in order for intimacy to increase.

Figure 1. Integrated Model of Intimacy



Attachment Theory and Intimacy

Attachment theory has direct relevance for intimacy processes. According to attachment theory, several innate systems, including the attachment behavioral system and the caregiving system, developed with the primary purpose of promoting survival and reproduction (Bowlby, 1973/1980/1982). These behavioral systems were originally proposed and examined within child-parent relationships and have subsequently been applied to adult romantic relationships (Bowlby, 1969/1982; Hazan & Shaver, 1994).

Whereas infant-parent relationships are the primary attachment bonds early in life (Bowlby, 1973/1980/1982), adult romantic relationships are the prototypical attachments in adulthood (Hazan & Shaver, 1994). In adult romantic relationships, sex also works to promote the attachment and caregiving systems (Fraley & Shaver, 2000). Adults feel a sense of security by developing an interconnected relationship with another person who is responsive to their needs and committed to promoting the relationship (Hazan & Zeifman, 1999). Therefore, having a partner who is responsive during vulnerable interactions is deeply important for intimacy development and felt security between relationship partners (e.g., Cordova & Scott, 2001; Hazan & Shaver, 1994). Intimacy processes and feelings of security influence one another; engaging in intimate interactions promotes feelings of security and, feeling secure, enables individuals to be vulnerable thus facilitating intimacy processes.

The attachment behavioral system becomes activated during times of distress, illness, and relationship threat and the goal of this system is to maintain a sense of security (Bowlby, 1973/1980/1982). Physical and psychological proximity (i.e.,

feelings of intimacy) with one's attachment figure (e.g., romantic partner) ideally provides emotional safety, security, comfort, and support during times of distress (Fraley & Shaver, 2000). Humans have an innate desire to seek closeness and caregivers have an innate drive to provide support (i.e., responsiveness) therefore facilitating the intimacy process.

The function of the caregiving behavioral system is to facilitate an attachment partner's sense of safety, security, and autonomy by providing comfort, reassurance, and responsiveness (Bowlby, 1982/1988; Kunc & Shaver, 1994). When individuals feel vulnerable, their attachment behavioral systems become activated which promotes attachment consistent behavior in order to facilitate emotion regulation (Bowlby, 1969/1982; Shaver & Mikulincer, 2014). In response, attachment partners ideally observe their partners' distress and engage in supportive caregiving behavior (Kunc & Shaver, 1994). In adult romantic relationships each partner may, at one time or another, feel threatened or vulnerable and in need of support. In healthy adult relationships, the caregiving and attachment roles are shared between partners (Fraley & Shaver, 2000). Sharing these roles allows each partner time to be temporarily vulnerable and in need of support and to be cared for by the non-vulnerable partner.

However, partners are not always reliable, supportive, and responsive during times of distress. Therefore, individuals develop different attachment styles based on their experiences of caregiver responsiveness during times of need. Attachment styles represent individual's beliefs about themselves and others regarding their self-worth in relationships and the degree to which partners are typically seen as dependable. Additionally, attachment styles govern different emotion regulation strategies and

behavioral response tendencies during times of vulnerability and distress (Kobak & Sceery, 1988).

Individual differences in the attachment behavioral system are often referred to as attachment style and are typically conceptualized along two dimensions: attachment anxiety and avoidance. Adults who are high on anxious attachment have an intense fear of rejection and abandonment and desire closeness. Individuals who are high on avoidant attachment tend to distance themselves and are uncomfortable with intimacy. They tend to avoid or devalue closeness with partners in order to control attachment-related distress (Fraley & Shaver, 2000). Attachment anxiety reflects differences in sensitivity to attachment-related distress; people with higher anxiety have a lower threshold and are more sensitive to distress. Attachment avoidance reflects approach-avoidance behavioral orientation in response to attachment threat (i.e., the tendency to approach or avoid partners when the attachment behavioral system is activated) (Fraley & Shaver, 2000). An individual's attachment style is characterized by their placement on both attachment dimensions (e.g., Bartholomew & Horowitz, 1991). People who are low on both anxious and avoidant attachment are characterized as having secure attachment. Individuals who have a more secure attachment style have a high threshold for attachment related distress and are capable and comfortable seeking closeness during times of discomfort (Fraley & Shaver, 2000).

Attachment Styles and Intimacy Processes

Attachment styles influence ideas of self-worth, expectations, and behavioral tendencies in relationships and thus influence intimacy processes (i.e., willingness to

be vulnerable and responsiveness). People with secure attachment can competently balance intimacy and independence. They are comfortable with intimacy because they believe they are worthy of love and valued by their partners (Hazan & Shaver, 1987). During vulnerable discussions, securely attached individuals should be willing and able to self-disclose and should do so in a way that increases closeness (Grabill & Kerns, 2000). Indeed, when faced with relationship difficulties, securely attached individuals are comfortable, confident, and competent in seeking support (e.g., Collins & Feeney, 2000). Married couples who are more secure disclose more to their partners about personal loss and disappointment (Kobak & Hazan, 1991). Securely attached individuals are able to foster more satisfying intimate relationships because they disclose more personally and self-revealing information to romantic partners compared to strangers. In contrast, there is no significant difference between the self-disclosures that insecure individuals make to partners and strangers (Keelan, Dion, & Dion, 1998). These findings suggest that securely attached people are able to disclose more deeply and differently to romantic partners, which promotes closeness. Additionally, securely attached individuals are more likely to enjoy sexual activity with their partner, mutually initiate sex, and are less likely to engage in sex with people outside of their relationship (Hazan, Zeifman, 1994).

Securely attached individuals are also better at providing supportive caregiving. They are more capable of interpreting a partner's non-verbal behaviors and feelings (Nollar & Feeney, 1994), which makes them more in tune with their partner's true emotions. Compared to insecure individuals, they tend to be more collaborative when working through problems, more responsive and sensitive, and have an absence of

negative and compulsive caregiving (Collins & Feeney, 2000, Kunce & Shaver, 1994; Simpson, Rholes, and Nelligan (1992). Overall, securely attached individuals are attentive, interested, receptive, and display facial and vocal pleasantness (Guerrero, 1996). These individuals are most likely to provide warm and supportive responsiveness during vulnerable discussions.

People who are characterized by high anxious and low avoidant attachment are motivated to form intimate relationships and desire closeness—they tend to engage in extreme approach behaviors in order to obtain closeness. Although they desire connection, they view themselves as generally unworthy of love and affection. These individuals tend to worry that their partners will abandon them due to inconsistency in close relationships (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987).

Regarding self-disclosure, individuals with high anxious and low avoidant attachment tend to be extremely willing to disclose (Mikulincer & Nachshon, 1991) and seek support from others (Ognibene & Collins, 1998). However, their self-disclosures tend to be driven solely by their own desire for closeness without regard for the other person (Feeney, Noller, & Patty, 1993). Their desire for closeness does not differ under distressing situations compared to low stress situations suggesting that these individuals have a more intense need for support and closeness and they do not discriminate between situations (Ognibene & Collins, 1998). These individuals, compared to all other attachment styles, are most likely to use physical contact to achieve closeness (Brennan, Wu, & Love, 1998) and are more likely to agree to unwanted sex due to fear that the partner will lose interest (Impett & Peplau, 2002).

Regarding caregiving, individuals with high anxious and low avoidant attachment tend to give inappropriate caregiving because they are driven by their own desire for closeness rather than their partner's needs. They tend to provide controlling caregiving and compulsive over-caregiving (Feeney, 1996; Feeney & Collins, 2001; Kuncé & Shaver, 1994). They are competent at providing instrumental support and they provide more instrumental support during stressful conditions; however, they provide emotional support under all conditions regardless of stress, reflecting their own desire for emotional closeness (Feeney & Collins, 2001). These individuals lack the skills to be truly responsive to their partner's needs because their own needs overshadow their ability to attend and respond to the partner.

Individuals with low anxious and high avoidant attachment see attachment figures as unreliable and unsupportive. They do not become visibly distressed when an attachment figure is not responsive and they do not tend to attribute non-responsiveness to some fault of their own. They downplay the importance of closeness and pull away from intimate relationships. They avoid expressions of vulnerability and desire independence (Bartholomew & Horowitz, 1991; Rothbard & Shaver, 1994). When asked how much intimacy individuals desire and how much they have, these individuals report wanting less closeness than they actually have (Mashek & Sherman, 2004).

Regarding self-disclosure, individuals with low anxious and high avoidant attachment tend to use strategies in order to create more distance, rather than seeking support (Mikulincer et al., 1993; Fraley & Shaver, 1998). They engage in low levels of self-disclosure and experience increased negative emotion when others disclose

(Bradford, Feeney, Campbell, 2002; Mikulincer & Nachshon, 1991). These individuals describe their relationships as low in mutual disclosure, low in intimacy, and high in conflict (Collins, Cooper, Albino, & Allard, 2002). Regarding physical contact, these individuals are more averse to touch and so do not give or elicit physical contact for support (Brennan et al., 1998). Individuals characterized by low anxiety and high avoidant attachment tend to pull away from partners rather than seeking closeness and will not seek out a partner and self-disclose naturally.

When in the caregiving role, people with low anxious and high avoidant attachment are generally unresponsive, insensitive, and unlikely to provide physical support (Feeney & Collins 2001; Kuncle & Shaver, 1994). In an experimental study, Simpson, Rholes, and Nelligan (1992) exposed female partners to anxiety-provoking stimuli and observed male partner's caregiving behavior. Avoidant men displayed more anger as their partner's anxiety increased and offered less support compared to secure men who offered more support and reassurance. These individuals tend to be less expressive with their romantic partners (Tucker & Anders, 1998) and have lower levels of receptivity, interest, attentiveness, facial and vocal pleasantness (Guerrero, 1996). Finally, Millings and Walsh (2009) examined attachment style and caregiving patterns and found that caregivers with high avoidant attachment engage in low proximity (e.g., physical closeness), low sensitivity (e.g., ability to pick up on a partner's non verbal cues), and low cooperation (e.g., ability to help without becoming controlling).

Individuals who are high in both anxious and avoidant attachment tend to view their attachment figures as being unreliable and themselves as being unworthy

of love. They have difficulty trusting romantic partners and, although they desire love and connection, they avoid situations that make them feel vulnerable (Bartholomew, 1990). These individuals fear rejection and actively avoid closeness, which results in immense difficulty establishing close and trusting relationships (Bartholomew & Horowitz, 1991).

Regarding intimacy processes, highly anxious and avoidant individuals have low levels of self-disclosure (Mikulincer & Nachshon, 1991), and, when talking with a romantic partner, they have limited verbal fluency, long response latencies, and are vocally anxious, compared to other attachment styles (Guerrero, 1996). As caregivers, these individuals engage in low physical contact, sensitivity, and responsiveness, and high levels of compulsive over-caregiving (Carnelley, Pietromonaco, & Jaffe, 1996; Feeney 1996; Kuncle & Shaver, 1994). Engaging in intimacy processes is extremely difficult for these individuals given their discomfort with connection.

Although researchers have primarily characterized attachment styles as a quality of the individual, attachment is also a quality of the relationship (e.g., Barry, Lakey & Oerhek, 2007; Kobak, 1994). All experiences with close relationship partners (including the current one) influence a person's attachment style. Thus, although attachment style is typically conceptualized as an individual difference, as it is in this study, individual's attachment styles are also influenced by their history with their current partner.

Partner-Inclusiveness during Vulnerable Disclosures

Intimacy process theories and attachment theory suggests that self-disclosure met with responsiveness or reinforcement is likely to lead to feelings of intimacy

(e.g., Cordova & Scott, 2001; Reis & Shaver, 1988) and security (Collins & Feeney, 2004). However intimacy theories do take into consideration how different qualities of vulnerable disclosures may influence intimacy processes differently. Vulnerable disclosures that typically pull for high responsiveness are emotional disclosures (Reis & Shaver, 1988) of the innermost self and involve experiences of vulnerability (Cordova & Scott, 2001; Roberts & Greenberg, 2002). These types of disclosures frequently occur in the beginning of new relationships as a way of becoming closer and more intimate. Strangers tend to divulge increasingly more personal information when becoming closer (see Derleg, Metts, Petronio, & Margulis, 1993 for a review). Examples of vulnerabilities include “I wish I would have told my father how much I loved him before he died” (Roberts & Greenberg, 2002), being bullied during adolescence, or feeling inadequate and embarrassed after a poorly delivered business presentation (Cordova & Scott, 2001). Sharing personal information is a way of communicating trust and a desire to share one’s innermost self with another.

As relationships continue, however, vulnerabilities regarding childhood events and past memories of hurt or personal secrets become less common and couples tend to discuss new vulnerabilities that are unfolding, including vulnerabilities that occur in the context of the relationship. Thus, vulnerabilities vary to the extent that they include the partner (i.e., *partner-inclusiveness*). I propose that partner-inclusiveness can be conceptualized as representing a continuum. An example of high partner-inclusiveness would be explicitly blaming the partner for an event or time when the partner caused the discloser feelings of embarrassment or sadness (e.g., you said that you would put my name on the house and you never did). An example of moderate

partner-inclusiveness would be acknowledging the partner's importance in the discloser's feelings of vulnerability (e.g., I think I am overweight and I'm worried that you are not attracted to me). At the lowest level, partner-exclusive, the disclosure describes an experience that does not include the partner (e.g., when I was 11 my mother told me that I had always been a disappointment). Disclosures that are highly partner-inclusive frequently involve content pertaining to a relationship transgression (i.e., a violation of a relationship norm). Examples of relationship transgressions include lying to a partner and sexual infidelity (Atkins, Baucom, & Jacobson, 2001; Knox, Schacht, Holt, & Turner, 1993). Therefore another example of a partner-inclusive vulnerable disclosure would be a self-disclosure of thoughts or feelings relating to a partner's past transgression.

To my knowledge, only one study has compared the extent to which couple disclosures that varied in their level of partner-inclusiveness influenced intimacy outcomes. Mitchell, Castellani, Herrington, Joseph, Doss, and Snyder (2008) examined the interpersonal process model of intimacy with community couples using video-taped discussions, self-report measures of post-interaction intimacy, and global ratings of disclosure and responsiveness. Couples engaged in two types of discussions. First, the couple discussed a time when someone other than their partner hurt their feelings. Next, the couple discussed a time that the partner hurt their feelings. Listener and speaker roles were reversed for each discussion; however, the order of discussion topics was always the same (i.e., hurt-by-other discussion always came first). The authors hypothesized that couples would experience higher intimacy when discussing a time that their partner hurt their feelings, predicting that these

discussions would generate higher self-disclosure and responsiveness, thus increasing intimacy. Results indicated that type of discussion did not predict feelings of intimacy for the listener or the speaker. That is, there was not a significant difference in participant feelings of intimacy in the partner-inclusive compared to the partner-exclusive condition. The authors did not, however, report whether there was a difference in amount or type of self-disclosure or responsiveness between the two conditions. When women were in the speaker role, their self-disclosure was a stronger predictor of their own intimacy in the partner-exclusive condition. In the partner-inclusive condition, male partner responsiveness was more predictive of women's intimacy. Overall, when in the speaker role, men's self-disclosure predicted their own feelings of intimacy, and women reported higher intimacy when their male partners were more responsive. In the listener role, men's responsiveness predicted their own feelings of intimacy, and men's self-disclosure predicted women's feelings of intimacy.

Beyond their prediction that couples would experience higher intimacy when discussing a time that their partner hurt their feelings, the authors did not provide any further theoretical justification for their prediction. Nor did they discuss how the qualities of these discussions may be different and may elicit a range of different emotions, which should impact the intimacy process. The authors also did not give any examples of discussion content, thus, it is not clear whether discussions of hurtful experiences outside of the relationship were completely partner-exclusive (e.g., my mother criticized me in front of you). Nor did the authors utilize any quality control checks to see if couples actually followed the directions for the discussions (e.g.,

talked about a time when someone other than the partner hurt their feelings when assigned that discussion). Additionally, for each couple, the hurt-by-other condition preceded the hurt-by-partner condition, which may have impacted the following discussion. The authors did not measure participant perceptions of proximal outcomes of intimacy (i.e., perceived responsiveness), rather they utilized global observed coder ratings of self-disclosure and responsiveness. The model emphasizes that perceived responsiveness is more important for intimacy compared to actual responsiveness. Therefore, collecting data on perceived responsiveness is an important component of the intimacy process. Furthermore, the authors did not examine whether self-disclosure and responsiveness are impacted by the content of the discussions (e.g., there are higher levels of self-disclosure and responsiveness in the hurt-by-partner condition), which is what they predicted.

Overall, this study supports components of the interpersonal process model of intimacy and supports findings from previous work suggesting that men's own behaviors are more predictive of their own feelings of intimacy while women's feelings of intimacy are better predicted by their partner's behaviors. However, given the lack of theoretical justification for examining hurt-by-other and hurt-by-partner conditions, weakness in study design (e.g., no checks on discussion content and same ordering of discussions) and failure to examine hypotheses (i.e., higher self-disclosure and higher responsiveness in the hurt-by-partner condition), more research is needed to develop a theoretical framework that addresses how qualities of vulnerable discussions will influence intimacy processes.

Partner-Inclusive Vulnerable Disclosures and Partner Responding

Based on attachment theory and research on relationship transgressions, the present research hypothesizes that discussions of more partner-inclusive vulnerabilities should elicit different emotions and should impact partner responsiveness differently compared to discussions of partner-exclusive vulnerabilities. Specifically, partners should be less responsive and engage in less reinforcing behaviors and more punishing behaviors in reaction to self-disclosures that are more partner-inclusive. Researchers have clearly stated why disclosures of vulnerability that do not include the partner facilitate responsiveness and intimacy. Disclosing vulnerability communicates trust and a desire to connect by sharing one's innermost thoughts and emotions. Disclosures that do not include the partner should pull for connection and elicit supportive responsiveness. Disclosures that do not include the partner are unlikely to make the partner feel vulnerable because the partner is not implicated in the disclosure. The disclosure involves thoughts and/or feelings that were influenced by an experience outside of the relationship. Thus, the responder should be more likely to engage in effective caregiving by being responsive. On the other hand, disclosing a highly partner-inclusive vulnerability may communicate a desire to share one's innermost feelings; however, it also communicates discomfort, sadness, and/or hurt caused by the partner. A more partner-inclusive disclosure is likely to trigger insecurity, fear, and distress in the responder and therefore should interfere with the responder's ability to engage in caregiving, thus negatively impacting responsiveness. More partner-inclusive disclosures are likely to make *both* the discloser and the responder feel vulnerable

because the partner may be implicated in the disclosure. The disclosure involves thoughts and/or feelings that were influenced by an experience in the relationship.

Hurtful Events and Partner Responding

Research on hurtful events in couple relationships suggests that partner-inclusive vulnerability disclosures should elicit distressing feelings from both the discloser and the responder and therefore negatively influence responsiveness. Relational transgressions cause hurt feelings and vulnerability (Vangelisti, 2001) because the victim often feels like the partner devalues the relationship (Leary, 2001). Hurtful events trigger attachment related distress because these events impact an individual's beliefs about being worthy of love and about the availability, responsiveness, and trustworthiness of a romantic partner (Feeney, 2005). Feeney (2004) identified five types of hurtful events that occur in romantic relationships including active dissociation (i.e., denying or recanting feelings of commitment and love), passive dissociation (i.e., excluding a partner from events and plans), sexual infidelity, criticism, and deception (e.g., lying and telling partner secrets) (Feeney, 2005). Hurtful events elicit a range of emotions including, sadness and fear (Vangelisti & Young, 2000), anxiety (Leary & Springer, 2001), and anger and hate (Fitness, 2001). Disclosers and responders may experience some or all of these emotions during a partner-inclusive vulnerability discussion, which should impact effective communication and intimacy processes.

In response to a partner-inclusive disclosure, and in reaction to feelings of sadness, fear, and anger, partners are likely to respond with defensiveness. Defensiveness is a response to a perceived attack in which an individual denies

responsibility for the event and attributes blame to the partner (Gottman, 1999). Defensiveness often occurs when individuals feel heightened negative emotions or discuss relational concerns (Becker, Ellevold, & Stamp, 2008). Defensiveness is observable and, sensing defensiveness in a partner, an individual often responds in a similar manner resulting in a perpetual cycle. Indeed, defensiveness has been identified as one of the most corrosive forms of couple communication (Gottman, 1999). Becker and colleagues (2008) found that the process of defensive communication occurs when partners feel emotions such as fear, anger, anxiety, sadness or hurt in response to relationship experiences. Common relational concerns evoking defensiveness are infidelity and threats of relationship dissolution (Becker et al., 2008). When individuals become defensive, they are preoccupied with their own feelings and are unable to see the situation from their partner's perspective. Discussions of partner-inclusive vulnerabilities are likely to elicit punishing responses (e.g., defensiveness) as opposed to responsiveness and reinforcement of vulnerable disclosure.

Specificity and Partner Responding

Specificity of vulnerable disclosures should influence the relation between disclosure and partner responding behavior. According to the interpersonal process model of intimacy, disclosures that have greater emotional depth engender greater feelings of intimacy. That is, disclosures that reveal more private thoughts and feelings, rather than general facts about the self, are more strongly associated with intimacy (Laurenceau et al., 1998; Reis, 2007). A related but distinct construct is specificity of disclosure. That is, whether the disclosure includes specific examples of

the issue or event that caused vulnerable feelings. Couple therapies encourage more specific disclosures of events and feelings to promote increased partner responsiveness (e.g., Baucom, Shoham, Muser, Daiuto, & Stickle, 1998; Markman, Stanley, & Blumberg, 1994). The Prevention and Relationship Enhancement Program, for example, (PREP; Markman & Floyd, 1980; Markman, Stanley, & Blumberg, 1994) teaches the speaker-listener technique which parallels aspects of specific self-disclosure and responsiveness from intimacy models. The discloser is instructed to talk specifically, rather than generally, about an event and related emotions. The responder is then instructed to paraphrase back the discloser's emotions and experiences in order to show validation and understanding.

However, there is no research examining how specificity functions to promote or hinder intimacy processes outside of couple therapy. Discussing specific experiences in the context of partner-exclusive disclosures should increase responsiveness because the discloser is revealing more personal detail and depth, which is known to increase responsiveness and intimacy. Moreover, the discloser is not blaming the partner for hurtful experiences and feelings and so the partner is less likely to be defensive in response to the disclosure. However, during partner-inclusive vulnerable discussions, without guidance from a therapist, specificity may actually decrease responsiveness. If the discloser is very specific about the time that the partner lied and cheated and goes into detail about the content of the infidelity, the partner may feel more threatened and behave in a more defensive and less responsive way. In contrast, if the discloser is very vague about a time when the partner lied or cheated (or says the partner does this more generally) and does not describe specific

events and feelings, the partner may actually feel less threatened and respond in more relationally adaptive ways. In sum, specificity should strengthen the relation between partner-inclusiveness of the disclosure and responsiveness, reinforcement, and punishment.

Attachment Theory and Partner Responding

According to attachment theory, a more partner-inclusive disclosure presents a particularly difficult challenge for couples because the partner is implicated in the disclosure and both individuals feel vulnerable. Rather than just the discloser feeling vulnerable, the discloser and the responder feel emotional discomfort. This challenges the partner's ability to respond sensitively to the discloser's needs due to personal feelings of distress. Because both individuals feel vulnerable, both individuals are motivated to reduce attachment related distress (Fraley & Shaver, 2000) in order to support their emotion regulation (Shaver & Mikulincer, 2014). Individuals may focus on their own discomforts and behave in a way as to minimize their own distress rather than engage in intimacy promoting behaviors. With neither partner in a position to provide support, both partners may instead focus on their own needs resulting in a lack of responsiveness and possible punishment of vulnerable disclosure (i.e., criticism, defensiveness).

Additionally, individuals with insecure attachment, compared to those with secure attachment, should respond to their partner in less relationally adaptive ways when discussing more partner-inclusive vulnerabilities. As real or perceived threat to relationship security increases, activation of the attachment behavioral system increases (Bowlby, 1969/1982). The content of more partner-inclusive discussions

(e.g., disclosures of past transgressions) may threaten the security of the relationship or physical and psychological proximity between partners (Makinen, Johnson, & Milikin, 2001). As discussions become more partner-inclusive, and more relationally distressing, beliefs and behavior associated with individuals' attachment styles are exacerbated (Bowlby, 1969/1982; Shaver & Mikulincer, 2014). As outlined previously, attachment styles are likely to influence the intimacy process for the discloser and the responder. The current study specifically examines responding. Therefore, partners' standing on both attachment avoidance and anxiety should influence their responsiveness to disclosures as well as their tendencies to reinforce rather than punish disclosures.

Discussions in relationships are often fluid and can start on one topic but then develop into a completely different topic within the course of several minutes. For example, a discussion that is initially low in partner-inclusiveness may become more partner-inclusive if an example brings about feelings or thoughts regarding an issue in the relationship. As a vulnerability discussion becomes more partner-inclusive, individuals with a more secure attachment style should be able to continue attending to their partner and respond supportively because they feel secure in the relationship. These individuals have a higher threshold for distress and are less likely to feel attachment related distress. Therefore, regardless of the level of partner-inclusiveness, securely attached individuals should respond to their partner's disclosures with high responsiveness and reinforcement, and low punishment. As a result, the discloser is more likely to perceive more securely attached partners as highly responsive and collaborative rather than unresponsive and critical.

Individuals who are higher in attachment anxiety and lower in avoidance should become more activated as the discussion becomes more relationally focused. Individuals should view a partner-inclusive discussion as threatening to proximity with the partner because the discussion implies that the partner has done something that negatively impacts the relationship. Thus responders who are higher in attachment anxiety and lower in avoidance are likely to use coercive attempts to achieve proximity, such as crying and criticizing (Pietromonaco, Greenwood, & Feldman Barrett, 2004). They tend to be more controlling and have low collaborative engagement (Millings & Walsh, 2009). They typically provide indiscriminate emotional support during stressful and non-stressful situations, indicating their desire for closeness rather than appropriate responding (Feeney and Collins, 2001). As a result, disclosers are likely to interpret responders who are higher in attachment anxiety and lower in avoidance as having low responsiveness and providing less reinforcing and more punishing responses.

Attachment avoidance represents the tendency to avoid partners in the presence of distress. People with higher avoidance and lower anxiety tend to avoid situations that elicit vulnerability (Bartholomew & Horowitz, 1991; Rothbard & Shaver, 1994). These individuals are typically perceived to be unresponsive (Feeney & Collins 2001; Kuncle & Shaver, 1994), physically distant and insensitive (Millings & Walsh, 2009). Although these individuals may not appear visibly distressed, a partner-inclusive vulnerability should elicit attachment-consistent behavior. As a result, these individuals should become more withdrawn in response to their partner's more partner-inclusive disclosures. Disclosers will likely perceive these responders as

having low responsiveness and low reinforcement. Because these individuals withdraw, they may engage in low levels of punishing responses.

As discussions become more partner-inclusive, highly anxious and avoidant individuals are likely to experience a heightened fear of rejection, attend to their personal feelings of distress, and avoid closeness. These individuals see their partners as unreliable and avoid vulnerable interactions (Bartholomew, 1990). They are low in responsiveness and sensitivity (Carnelley et al., 1996; Feeney 1996; Kuncle & Shaver, 1994). Therefore, the discloser is more likely to perceive these responders as less responsive and less reinforcing. Research is mixed on whether these individuals engage in punishing behaviors (e.g., criticism or put-downs). Some research suggests that these people display more anger (Simpson et al., 1992) and more criticism during stressful interactions (Feeney & Collins, 2001); therefore, it is possible that the discloser will perceive their behaviors punishing.

In sum, responsiveness, reinforcement, and punishment of partner-inclusive vulnerability disclosures should depend on the partner's attachment style. As discussions become more partner-inclusive, individuals with insecure attachment should behave in less relationally adaptive ways when responding. In contrast, individuals discussing less partner-inclusive vulnerabilities should experience less distress so their attachment styles should exert less influence on their ability to respond in a way that should increase intimacy.

Mindfulness and Partner Responding

The attachment behavioral system is an emotion regulatory process that is directly influenced by intimate relationship contexts. Mindfulness is an emotion

regulatory strategy that should function outside of interpersonal influence.

Attachment reflects individuals' beliefs about the relationship, relationship partners, and sense of self-worth in the relationship, whereas mindfulness functions independently of these factors (Ryan, Brown, & Creswell, 2007). Mindfulness allows an individual to experience moment-to-moment reality rather than becoming distracted by fears and insecurities based on past experiences (Ryan et al., 2007). Attachment and mindfulness warrant co-examination within the context of vulnerability discussions because of their distinct associations with interpersonal influences.

Mindfulness refers to the self-regulation of attention to facilitate focus on the present moment in a non-reactive and non-judgmental way (Bishop et al., 2004). This includes attending to feelings and thoughts as they arise, and the ability to refocus attention on the present when temporarily distracted. Mindfulness is characterized as an open and accepting stance towards one's thoughts and experiences regardless of whether they are enjoyable or distressing (Bishop et al., 2004). Therefore, mindfulness includes being both aware and accepting of thoughts and emotions. By being aware and accepting, individuals notice that thoughts and emotions are transitory manifestations of the mind rather than stable "truths." Once this is realized, people have more freedom to respond in intentional and relationally adaptive ways, rather than ineffective reactions. Indeed, mindfulness is known to positively influence social and emotional intelligence by supporting attentiveness, emotion regulation, and empathy (Goleman, 1995/2006).

Individuals with higher attentiveness, effective emotion regulation, and empathy have better relationships. More attentive couples experience higher relationship satisfaction and greater stability (Gottman, 2011). These individuals are better at identifying when a partner needs support, and notice what makes a partner happy, worried, or stressed (Gottman, 2011). The anterior cingulate cortex (ACC) is a part of the brain that is highly involved in the ability to regulate attention, and this area becomes stronger through mindfulness training (Allen et al., 2012). Effective emotion regulation is similarly related to relationship satisfaction and stability (Gottman, 2011). Individuals with high mindfulness are able to engage in distressing discussions and effectively regulate their emotions by experiencing sensations, thoughts, and emotions as transitory and disengaging from evaluative interpretations (Ryan et al., 2007) that could be detrimental to the relationship. Several studies have shown that individuals with higher mindfulness are more empathic (Beddoe & Murphy, 2004; Birnie, Speca, & Carlson, 2010; Wachs & Cordova, 2007), and empathy has been shown to be particularly important during difficult discussions because it moderates conflict escalation and tension (Carrère, Buehlman, Gottman, Coan, & Ruckstuhl, 2000). Individuals with higher mindfulness are more attentive and open to their partner's experiences and are more engaged in their relationships.

Conversely, individuals with low mindfulness tend to engage in rumination about the past or worry about the future and are frequently pulled out of the present moment. These individuals are more reactive to their own feelings of distress and have difficulty maintaining attention and regulating their emotions. They tend to get pulled into thoughts and emotions that are *about* one's experience and related

memories and implications rather than attending directly to the *actual* experience (Bishop et al., 2004). When one is caught up by peripheral thoughts, he has limited mental capacity to focus on the present moment (Bishop et al., 2004). People with lower mindfulness may behave compulsively without awareness of how their behavior influences others. They may experience hurtful events as reflections of themselves rather than passing situational phenomena. For example, imagine that an individual has a particularly difficult day at work and then criticizes her partner for being lazy and not doing the dishes. A partner with low mindfulness might internalize the criticism, have the belief that he is lazy, and then react with anger and escalate to conflict. A mindful partner, on the other hand, could step back from the situation because he is aware of both his partner's frustration and his own hurt in response to the criticism. Rather than simply reacting, the mindful partner would have better perspective and empathy and could respond in a more effective way. Whereas high mindfulness promotes healthy relationship functioning, low mindfulness acts as an impediment to attentiveness, self-regulation, empathy, and ultimately connection between partners. People with low mindfulness are often absorbed by thoughts and emotions rather than participating in the present moment.

As vulnerability discussions become more partner-inclusive, individuals are likely to feel more defensive, experience more negative emotions, and should be motivated to attend to their own feelings of discomfort (Becker et al., 2008; Fraley & Shaver, 2000). Because more partner-inclusive vulnerabilities implicate the partner and suggest that the partner has done something to cause the discloser pain, either

directly or indirectly, responding in a way to promote intimacy should be particularly challenging for individuals with lower mindfulness.

During a more partner-inclusive vulnerability discussion, responders with lower mindfulness should have more difficulty with attentiveness, emotion regulation, and empathy and therefore be less responsive, and engage in less reinforcing and more punishing responses. As distress increases, cognitive abilities, particularly the ability to pay attention and process information, decline (Hopko, Crittendon, Grant, & Wilson, 2005). Responders with higher mindfulness will be better able to monitor and manage their own emotions and maintain attention when feeling distress whereas those with lower mindfulness will be more influenced by their discomfort and become distracted by their own thoughts and emotions. Furthermore, individuals with higher mindfulness should be better equipped to tolerate the negative emotions that are brought about by more partner-inclusive vulnerability discussions and engage in more relationship promoting behaviors such as perspective taking and validation. Those with lower mindfulness should be reactive to their own emotions of disappointment, fear, or anger and should have more difficulty tolerating their own emotions and, at the same time, understanding their partner's thoughts and emotions. These individuals should instead react to their own feelings and engage in behaviors that minimize their own distress, such as becoming defensive, which would be interpreted as a punishing behavior. Paying attention to a partner, and regulating one's emotions, should allow for greater opportunity for positive reinforcement of disclosure, such as empathy and responsiveness. Higher mindfulness enables individuals to notice and respond to the emotions of others whereas lower

mindfulness impedes attention and should detract from one's ability to provide empathy. People with lower mindfulness should be more reactive to their distress and distracted by memories, fears, and expectations brought about by a partner-inclusive vulnerability. As a result, they should be less responsive, less reinforcing, and engage in more punishing behaviors (e.g., defensiveness, criticism, blame).

Overview of the Current Study

Intimacy is important for individual and couple well-being. Intimacy process models emphasize the importance of vulnerable self-disclosure, partner responsiveness, and perceived partner responsiveness; however, theorists have not examined whether qualities of vulnerable disclosures impact intimacy process outcomes. The primary goal of this research is to provide support for an expansion of intimacy process theory by elucidating two specific qualities of vulnerable disclosures (i.e., partner-inclusiveness and specificity) that influence intimacy process outcomes. The secondary goal of this research is to examine how individual differences in emotion regulation impact the proposed expanded intimacy process model.

Specific Aims of the Proposed Research

Specific Aim 1

Expansion of Intimacy Process Theory

Specific Aim 1: Provide support for an expansion of intimacy process theory elucidating two specific qualities of vulnerability disclosures (i.e., partner-inclusiveness and specificity) that influence intimacy process outcomes.

Theory suggests that intimacy increases when individuals' disclosures of vulnerabilities are met with partners' responsiveness, reinforcement, and/or the absence of punishment. However, theorists have not delineated the qualities of vulnerable disclosures that influence intimacy processes. Drawing on attachment theory, and research on emotion and communication during hurtful events, this research hypothesized that specific partner-exclusive vulnerable disclosures (i.e., disclosures that do not implicate the partner) would support proximal outcomes of intimacy processes (i.e., higher responsiveness and reinforcement and lower punishment). In contrast, specific partner-inclusive vulnerable disclosures (i.e., disclosures that did implicate the partner in feelings of vulnerability) would not. Specifically, individuals' disclosures that are high in partner-inclusiveness, and describe specific examples of hurt, would be negatively associated with perceived partner responsiveness and reinforcement and positively associated with perceived punishment.

Specific Aim 2

Emotion regulation and Intimacy Process Theory

Specific Aim 2: To examine how individual differences in emotion regulation impact the proposed expanded intimacy process model.

Research suggests that the emotion regulatory factors of secure attachment and high mindfulness facilitate intimacy during difficult discussions. Therefore, it was expected that attachment style and mindfulness would influence the proximal outcomes of intimacy.

Vulnerable disclosures were expected to interact with partner avoidant and anxious attachment to predict perceived partner responsiveness, perceived partner reinforcement, and perceived partner punishment.

During specific partner-inclusive disclosures, it was expected that partners with a more secure attachment style (i.e., low avoidant and low anxious attachment) would be able to continue attending to the discloser. In doing so, these partners would be perceived as the most responsive, most reinforcing, and the least punishing compared to all other attachment styles. Partners with high avoidance, regardless of anxiety, were expected to be perceived as displaying the lowest responsiveness and reinforcement compared to all other attachment styles. Reactions from partners with high anxious attachment and low avoidance were hypothesized to be perceived as the most punishing compared to all other attachment styles.

Vulnerable disclosures were expected to interact with the partner's mindfulness to predict perceived partner responsiveness, reinforcement, and punishment. Disclosers were expected to perceive their partners' reactions as less responsive, less reinforcing, and more punishing during specific partner-inclusive discussions when they had lower mindfulness compared to those with higher mindfulness.

Research Design and Method

Participants

Eighty-two heterosexual cohabiting couples were recruited through flyers and announcements on a university campus to participate in the present study. Interested individuals contacted the laboratory by email or phone; they were given a description

of the study and answered questions to determine their eligibility. Couples were eligible to participate if both partners were between the ages of 18 and 55, if they had been cohabiting for at least 6 months, and could read and speak English. See Table 1 for demographics.

Table 1
Demographics

	Males	Females
Education Completed		
Less than high school	1.3%	0%
High school or GED	48.7%	45.1%
Some college	12.8%	8.8%
Associate's degree	6.4%	12.8%
Bachelor's degree	24.4%	23.1%
Graduate degree	6.4%	6.4%
Personal Income		
Less than 10k	39.5%	59.1%
10-20k	19.8%	19.7%
20-30k	12.3%	10.6%
30-40k	4.9%	3.0%
40-60k	5.0%	6.0%
60-80k	7.4%	1.5%
Over 80k	1.2%	0.0%
Race/ethnicity		
Caucasian/non-Hispanic	62.0%	54.9%
Hispanic	2.5%	1.3%
African American	13.9%	10.3%
Asian American	13.9%	17.9%
Native/Pacific Islander	1.3%	0.0%
Biracial	6.3%	12.2%
Age	$M= 24.0$ ($SD=5.0$)	$M= 22.0$ ($SD=3.0$)
Dating Length	$M= 42.0$ months ($SD= 26.1$)	
Cohabiting Length	$M= 28.6$ months ($SD= 43.19$)	
Engaged	14.0%	
Married	25.0%	
Cohabiting	61.0%	

Note: M = mean; SD = standard deviation

Procedures

Couples came to the laboratory to complete questionnaires, participate in two videotaped vulnerability discussions, and additional measures beyond the scope of this study. Questionnaires completed in the laboratory included measures of attachment style and mindfulness and perceived partner responsiveness, reinforcement, and punishment during laboratory discussions. In order to facilitate the video-taped partner-exclusive or partner-inclusive vulnerability discussions, individuals also responded to an open-ended, written prompt prior to their couple discussions (see appendix A for full instructions). A similar prompt has been used to prime individuals' feelings of vulnerability during couples' intimacy discussions (Roberts & Greenberg, 2002). Whether the couple was assigned to discuss a partner-exclusive or a partner-inclusive vulnerability was randomized prior to their arrival (Urbaniak, G. C., & Plous, S, 2013). Researcher was blind to condition. Both members of a given couple were instructed to discuss the same type of vulnerability. For example, if the couple was assigned to discuss partner-inclusive vulnerabilities, then both individuals were instructed to discuss a partner-inclusive vulnerability. Vulnerabilities were assigned at the couple level rather than at the level of the individual because couple discussion topics are known to influence one another. For example, if the male was assigned to discuss a partner-inclusive vulnerability, and his discussion was first, tension from that discussion would likely bleed over into the female's topic. Therefore, if her topic was different (partner-exclusive), it may have still have similar qualities to a partner-inclusive discussion. In order to better

understand the impact of partner-inclusiveness, both individuals were assigned the same type of vulnerability.

Couples first completed informed consent procedures. Next, the couple was separated to fill out the first set of questionnaire packets, which included the measures of mindfulness, attachment, and the open-ended vulnerability-priming prompt. After filling out the first packet, couples were given a second packet of questionnaires that included measures that were beyond the scope of this research study. While participants completed the second packet, a research assistant randomly determined the order of discussion (i.e., male versus female first) by coin flip. Next, individuals were brought together in a laboratory room to discuss the first partner's vulnerability.

Couples were instructed, "For the next 10 minutes we'd like you to talk with each other about the vulnerability identified by (male or female name). Don't feel pressured to share everything you wrote down, just let the conversation flow as it might at home if you were talking about these feelings by yourselves" (Roberts & Greenberg, 2002).

After 10 minutes, the research assistant knocked on the interview room door and individuals were separated to fill out self-report assessments of perceived partner responsiveness and perceived partner reinforcing and punishing communication behaviors in reference to the prior discussion. Next, participants were reunited for the other partner's vulnerability discussion. The same instructions described above were given to the couple for the second discussion. Each person was compensated for participation with a check for \$25.

Measures

Self-Report Measures (see Appendix for copies of all measures)

Demographic Items

Personal demographics included participant age, sex, race/ethnicity, education, and income. Relationship demographics included date of cohabitation and length of dating relationship.

Perceived Partner Responsiveness

This scale was created to assess perceived partner responsiveness when examining the intimacy process during daily diary studies (Laurenceau, Feldman Barrett, & Pietromonaco, 1998). Using a 5-point response scale that ranged from 1 (*very little*) to 5 (*almost always*), participants were instructed to reflect on the discussion they just had with their partner and asked 1) “to what degree did you feel accepted by your partner” 2) “to what degree did you feel understood by your partner” 3) “to what degree did you feel cared for by your partner.”

See Appendix B for full scale.

The measure is based on Reis and Shaver’s (1988) interpersonal process of intimacy and is meant to assess feelings about a partner’s responsiveness during recent interactions. Items were summed so that higher scores reflect higher levels of perceived responsiveness. Composite scores may range from 3 to 15 with higher scores indicating greater perceived partner responsiveness. These three items are positively correlated with perceived partner disclosure ($r = .39$), self-disclosure ($r =$

.41), and intimacy ($r = .59$; Laurenceau et al., 1998) suggesting evidence of construct validity.

This scale has been used to assess perceived partner responsiveness during conflict discussions between newlyweds (McDougall, 2015) with alpha estimates of .97 following a minor conflict discussion and .95 and .96 following a major conflict discussion, for husbands and wives respectively. It has also been used to measure perceived partner responsiveness during discussions between couples experiencing health related issues (Bois et al., 2016; Manne et al., 2014) Additionally, several researchers have used similar scales to assess perceived responsiveness (Laurenceau et al., 2005; Maisel & Gable, 2009).

Perceived Partner Reinforcing and Punishing Behaviors

Perceptions of the partner's reinforcing and punishing behaviors during disclosure discussions were assessed with the partner-report of adversarial (i.e., punishing) and collaborative (i.e., reinforcing) communication subscales of the Conflict Communication Inventory (CCI; Sanford, 2010). The CCI measures punishing communication behaviors, such as expressions of criticism and hostility, and reinforcing communication behaviors, such as expressions of warmth and understanding during specific interactions. Each subscale consists of 7 items that assess perceptions of partner behavior. Participants were asked, "During the discussion you just had with your partner, how much did your partner engage in the following behaviors?" Participants responded on a 7-point scale ranging from 1 (*never*) to 7 (*the whole time*). Example punishing items include "My partner said something mean" and "My partner criticized me." Example reinforcing items include

“My partner made me feel that my viewpoint was valuable” and “My partner carefully listened so he/she could understand me.” See Appendix C for full scale.

The initial validation study for this measure examined and compared the short-term predictive validity of reports of self-behavior, partner-behavior, and observer ratings of couple communication (Sanford, 2010). To assess predictive validity, reports of self-behavior, partner-behavior, and observer ratings from one conversation were compared to a second conversation that was scored by a separate group of observers. Partner-behavior reports and observer ratings were both equally high with correlations ranging from .58 to .68 suggesting that the CCI can validly assess couple communication behaviors via partner-report and observer ratings at a similarly high level (Sanford, 2010).

Previous research has used a modified version of this scale with a newlywed sample to examine how reinforcing and punishing communication behaviors during conflict predict changes in intimacy over time (LaMotte, Khalifian, & Barry, 2016); internal consistency alphas for perceived partner punishing communication were .86 and .87 and perceived partner reinforcing communication internal consistency alphas were .91 and .92 for wives and husbands, respectively.

Adult Attachment Style

Adult attachment style was measured with the Experiences in Close Relationships- Revised (ECR-R; Fraley, Waller, & Brennan, 2000). This 36-item measure assesses individual differences in attachment-related anxiety (i.e. fear of abandonment) and attachment related avoidance (i.e. discomfort with closeness). The ECR-R is a revised version of the original Experiences in Close Relationships scale

(ECR; Brennan, Clark, & Shaver, 1998). Items are rated on a 7-point response scale ranging from 1 (*strongly agree*) to 7 (*strongly disagree*). Respondents are instructed to indicate how they generally experience relationships and not just how they experience their current relationship. Attachment anxiety and attachment avoidance scores are obtained by averaging the 18-items in each subscale to make two composite scales. Sample items from the anxiety subscale include, “I’m afraid that I will lose my partner’s love” and “I find that my partner(s) don’t want to get as close as I would like.” Sample items from the avoidance subscale include, “I get uncomfortable when a romantic partner wants to be very close” and “I prefer not to show a partner how I feel deep down.”

See Appendix D for full scale.

In order to revise the original ECR, Fraley and colleagues (2000) used item response theory and factor analysis to select items that were more evenly distributed across the entire trait range of anxiety and avoidance. This allows researchers to identify and differentiate individuals that score within the moderate to low end of a trait range as well as those who score at the high end of a trait range. Further factor analysis has shown that the ECR-R comprises distinctive dimensions with high internal reliabilities for anxiety, .95; and avoidance, .93 (Sibley & Lui, 2004).

Evidence suggests that the ECR-R is particularly well suited to measure attachment dimensions in romantic relationships compared to other frequently used attachment measures (Sibley, Fischer, & Liu, 2005). The ECR-R was compared to the Relationship Questionnaire (RQ; Bartholomew, & Horowitz, 1991) by having participants complete a diary entry for each social interaction that was 10 minutes or

longer over a two week span (Sibley, Fischer, & Liu, 2005). The researchers assessed avoidance, anxiety, and enjoyment experienced during social interactions with a romantic partner, family member, and close friend. The ECR-R accounted for an additional 15% to 20% of the variance, above the 10% to 15% accounted for by the RQ, in avoidance, anxiety, and enjoyment experienced in romantic relationships, however the ECR-R did not account for a significantly larger portion of the variance in avoidance, anxiety, or enjoyment when assessing family and close friend interactions. These findings suggest that the ECR-R better reflects variation in attachment to romantic partners and not more general friendships and family relationships.

Mindfulness

Mindfulness was measured with the Mindful Attention Awareness Scale (MAAS; Brown et al., 2003). This single factor measure assesses individual differences in dispositional mindfulness in a variety of situations. The 15-item self-report scale measures the presence and absence of general mindfulness as well as mindfulness in specific interactions, interpersonal communication, thoughts, and emotional and physical states. Using a 6-point response scale from 1 (*almost always*) to 6 (*almost never*), respondents specify how often they experience the situation described in each statement. Participants are instructed to indicate the answer that “really reflects their experience rather than what they think their experience should be.” Mindfulness scores are obtained by averaging all of the individual’s responses, with higher scores reflecting higher levels of mindfulness. Example items include, “I break or spill things because of carelessness, not paying attention, or thinking of

something else,” “I tend to not notice feelings of physical tension or discomfort until they really grab my attention,” “I find myself preoccupied with the future or the past,” “I snack without being aware of what I am eating.” See Appendix E for full scale.

The MAAS was validated with community, college, and cancer populations. Cronbach’s alpha range from .80 to .87 across samples (Brown, & Ryan, 2003). The test retest reliability was .81, across a 4-week period and was examined with an independent sample of 60 psychology students. These finding suggests that the measure assesses a relatively stable trait. The MAAS demonstrates convergent and discriminant validity because it is related to but not redundant with constructs with which it should theoretically relate. Specifically, across samples (community, college, and cancer populations), the MAAS was significantly weakly correlated to the construct of openness to experience scale ($r = .18$); moderately related to pleasant affect ($r_s = .30$ to $.39$) and life satisfaction ($r_s = .26$ to $.37$). MAAS was positively related to vitality ($r_s = .40$ to $.46$), self-actualization ($r = .43$), competence ($r_s = .39$ to $.68$), and a measure of ability to relate to others ($r_s = .28$ to $.31$). The MAAS was inversely related to measures of anxiety ($r = -.34$), and depression ($r = -.53$), angry hostility ($r = -.41$), self-consciousness ($r = -.45$), and impulsiveness ($r = -.29$).

Observational Coding

Observational coding systems are frequently used in couple research and have adequate reliability and validity. Coding systems are either microanalytic or macroanalytic. Microanalytic coding systems code a large amount of detailed information during couples’ discussions. For example, coders may rate eye contact or criticizing statements each time they happen. Examples of microanalytic systems

include the Marital Interaction Coding System (MICS; Hops, Wills, Patterson, & Weiss, 1972) and the Couple Interaction Coding System (CISS; Gottman, 1979). These coding systems require extensive training and coding one video takes approximately two hours.

Macroanalytic coding systems capture global themes such as overall negativity. Examples of macroanalytic systems include the Rapid Couple Interaction Scoring System (RCISS; Krokoff, Gottman, & Haas, 1989) and the Marital Interaction Coding System–Global (MICS-G; Weiss & Tolman, 1990). These coding systems rate behaviors or communication patterns globally. For example, the MICS-G rates the frequency of a communication pattern using a Likert-scale summary code. Researchers suggest that macroanalytic coding systems capture broad couple dynamics adequately. Therefore, these coding systems are best for researchers interested in overarching themes of couple discussions rather than numerous detailed behaviors (Bakeman & Gottman, 1997).

Vulnerability Coding System

A coding system was developed to differentiate between partner-inclusive and partner-exclusive vulnerable disclosures (**Vulnerability Coding System** (VCS); Khalifian & Barry, unpublished). It was based on macroanalytic principles and aimed to assess themes based on the content of couples' interactions. The specific codes were developed based on Roberts and Greenberg's (2002) instructions for their laboratory intimacy task.

The VCS has two codes. It includes partner-inclusiveness (the extent to which the disclosure implicates the partner in causing vulnerability) and specificity of

disclosure (the extent to which the discloser provides specific examples of vulnerability). See Appendix F for an example coding sheet.

Because this study used random assignment, the partner-inclusiveness code was used as a manipulation check in order to assess whether couples adhered to the randomization instructions. Random assignment was used as the predictor variable in analyses rather than the partner-inclusiveness VCS codes. The coding directions for the VCS will first be described and then how the VCS was used as a manipulation check.

Discussions were coded in 2.5 minute increments. There were four coding increments for each discloser, and only the discloser was coded. For content of vulnerability, increments were coded as 1 (*partner-exclusive*), 2 (*moderately partner-inclusive*), and 3 (*highly partner-inclusive*). Segments coded “1” (*partner-exclusive*) do not implicate or include the partner at all. Examples of vulnerable disclosures coded “1” include, “My friend lied to me about being very sick. I was really confused and felt betrayed that he lied about something so important. Now I have trouble trusting people.” “People who I thought were my friends in middle school used to spread hateful rumors; so I decided to just keep to myself and not have friends. I still have trouble trusting people.” “My boss embarrassed me during the presentation today by saying that I did a poor job in front of everyone. I was so ashamed I just left the building.” “I continue putting effort into my relationships with my parents but they don’t seem to care about me and it hurts;” and “I don’t feel like I could ask to live with my parents because I am not sure they would want me there.”

A vulnerability that is coded “2” (*moderately partner-inclusive*) is a vulnerability that is very obviously due to the discloser’s own insecurities; however, the disclosure involves the partner in some way. Examples of vulnerabilities that are coded “2” include, “I feel fat and I am afraid that you are not attracted to me.” “I don’t think I will be able to find a job when I graduate and I won’t be able to support you when you go to medical school.” “I feel like you always do better than me academically; I wish that I were as smart as you.” “I feel insecure when I think about your relationship with your previous girlfriend.” The discloser feels vulnerable due to his or her own feelings about a situation and not because of something the partner has done.

A disclosure coded “3” (*highly partner-inclusive*) implicates the partner in causing the discloser feelings of sadness, hurt, or embarrassment in some way. The discloser feels pain due to the belief that the partner has done something to intentionally hurt the discloser. Examples of partner-inclusive vulnerabilities include, “It hurts my feelings if I am cleaning up the house and then you make it messy.” “You don’t treat me as an equal. You didn’t put my name on the house when you said you would;” and “Because you cheated on me, I still have trouble trusting you.” “It makes me mad when you say I waste money! I am buying things for the baby.”

Coders were instructed to code a segment as 0 (*no vulnerability*) if the discloser explicitly states that there is nothing he or she feels vulnerable about and there is nothing the partner has done to make the person feel vulnerable. Examples of no vulnerability include, “Honestly, there is nothing I feel vulnerable about;” “You are a good person and you don’t make me feel anything negative.” Coders were

instructed to code a segment as (77) if the discloser does not say anything for the entire 2.5 minutes, and (99) if the discloser is off topic for the entire 2.5 minutes.

Each discloser received four partner-inclusiveness codes based on the 10-minute discussion. These four codes were averaged in order to create one partner-inclusiveness code ranging from 1-3 for each disclosure. The codes 0, 77, and 99 were not used when creating the composite score. Therefore, if an individual's scores were 1, 2, 1, and 77, that person's score would be 1.33. The composite partner-inclusiveness score ranged from *1 = partner-exclusive* to *3 = highly partner-inclusive*.

Specificity Coding

For specificity coding, increments were coded as 0 (*low specificity*) and 1 (*high specificity*). The instructions for a *low specificity* code were “the discloser did not give a specific example of an issue or event that caused hurt feelings. This disclosure is more general.” Examples of low specificity disclosures included, “I continue putting effort into my relationships with my parents but they don't seem to care about me and it hurts.” “I feel fat and I am afraid that you are not attracted to me,” and “You don't take any interest in what I do.”

The instructions for a *high specificity* code were, “the discloser gave a specific example of the issue or event that caused hurt feelings. This disclosure is specific.” Examples of specific disclosures included, “My friend lied to me about being very sick. I was really confused and felt betrayed that he lied about something so important. Now I have trouble trusting people,” and “You don't treat me as an equal. You didn't put my name on the house when you said you would.”

Each discloser received four specificity codes based on the 10-minute discussion. These four codes were averaged in order to create one specificity code from 0-1 for each disclosure. Therefore specificity ranged from $0 = \text{low specificity}$ to $1 = \text{high specificity}$.

Observational Coding Training

Two coders trained for 20 hours for VCS coding. I held two initial meeting with the coders in which we met for three hours and talked through the codes, answered questions, and watched three videos from a different study in order to practice the codes together. I then watched the two coders code three videos together. They stopped the video every 2.5 minutes and verbalized their codes and we talked through any discrepancies. The coders then coded six videos on their own. They were considered reliable after coding six discussions with intra-class correlations above .80. Coders proceeded to code alone for six discussions and then double-coded three discussions to check that coding remained reliable. After initial training, the coding team met with the first author weekly in order to discuss any complications and calculate intra-class correlations for newly double-coded discussions. For any discussions with major discrepancies in coding, the first author watched the discussion with both coders in order to reach an agreement in coding. Discrepancies in coding only occurred with five individuals. Seventy-one percent of discussions were coded by both coders and the intra-class correlation between coders was .96 for partner-inclusiveness and specificity. Only one partner was coded at a time and an entire couple was never coded in the same session. For example, a coder would code the female from the couple with identification number 12 and then the female from

the couple with the identification number 30 and then the male from the couple with identification number 67. This was done so that the coding of one individual would not influence the coding of his partner. Additionally, coders were blind to all study hypotheses. To form composite scores of partner-inclusiveness and specificity for each disclosure, a mean score of each type of code was computed for each partner—one for partner-inclusiveness and one for specificity. Mean scores were calculated using both coders' codes. Non-informative scores (i.e., 0, 77, and 99) were not included in mean calculations.

Vulnerability Manipulation Check

Couples were randomly assigned to discuss either partner-inclusive or partner-exclusive vulnerabilities. Therefore, the partner-inclusiveness score of the VCS coding was used as a manipulation check.

The randomization check was performed by comparing participants' scores from the VCS with their original random assignment (i.e., partner-inclusive or partner-exclusive conditions). Individuals with a score from 1-1.65 on the VCS received a score of 1. Individuals with a score of 1.651 to 2.35 received a score of 2, and individuals with a score from 2.351 to 3 received a score of 3. There were 11 individuals (6.7%) who discussed the opposite of their randomization assignment. The randomization score for these 11 individuals was switched so that the variable for random assignment matched with the manipulation check (i.e., 6 individuals switched from partner-exclusive to partner-inclusive and 5 individuals switched from partner-inclusive to partner-exclusive). One-way ANOVAs were used to examine differences between these 11 individuals and the rest of the sample. On average, the 11

individuals were less specific when disclosing vulnerabilities $F(1, 163) = 5.413, p = .02$. There were no significant differences in anxious or avoidant attachment, mindfulness, or responsiveness, reinforcement, or punishment $F_s[1, 163] < 2.56, ns$. There were 15 individuals (9.1%) who scored a 2 on the VCS coding. Because the VCS coding is different from the original directions, the content of these discussions was re-examined using the original partner-exclusive/partner-inclusive discussion directions. According to the study directions, partner-exclusive vulnerabilities are those “that have occurred outside of the relationship—rather than something the partner has caused” and partner-inclusive vulnerabilities are those “that the partner has caused”. The content of these discussions was re-examined and all of the discussions maintained the original randomization code.

Results

Preliminary Analyses

At the individual item level, less than 5% of the data were missing and were replaced using a mean imputation procedure. Variables were found to be adequately normally distributed with skew less than 2 and kurtosis less than 5.

Descriptive Analyses

Means and standard deviations for all variables are reported in Table 2. On average, men and women reported low anxious and avoidant attachment. Men and women were moderately mindful and experienced high responsiveness and reinforcement and low punishment, on average. Paired sample t tests were used to compare cross-partner scores on like measures. Women’s disclosures were more

specific compared to men's, $t(81) = 2.61, p = .01$; and women had higher anxious attachment compared to men, $t(81) = -2.54, p = .01$. There were no other cross-partner differences, $ts[81] < 1.41, ns$.

Table 2
Means and Standard Deviations of all predictor and outcome variables

	Men	Women
	<i>M (SD)</i>	<i>M (SD)</i>
Specificity	0.24 (0.29)	0.36 (0.36)
Anxious Attachment	2.46 (1.21)	2.88 (1.20)
Avoidant Attachment	2.27 (0.99)	2.16 (0.83)
Mindfulness	4.28 (0.86)	4.11 (0.84)
Perceived Responsiveness	13.11 (2.78)	12.82 (3.04)
Perceived Reinforcement	5.86 (1.05)	5.77 (1.15)
Perceived Punishment	1.92 (0.99)	1.83 (0.74)

Note. *M* = Mean, *SD* = standard deviation; All variables were calculated as the means using the measure response scales (see measures section for details on range).

One-way ANOVAs were also used to examine differences between cohabiting, engaged, and married couples. There was a significant difference between groups on avoidant attachment, $F(2, 162) = 4.96, p = .008$ and mindfulness, $F(2, 162) = 4.76, p = .01$. Bonferroni post hoc tests revealed that cohabiting couples had higher avoidant attachment compared to married couples ($p = .02$), and engaged couples had higher mindfulness compared to cohabiting couples ($p = .04$). There were no significant differences in anxious attachment, specificity, or responsiveness, reinforcement, or punishment $F_s[2, 162] < 1.73, ns$.

Table 3 displays correlations among measures. Pearson correlations between men and women on like measures were examined first. Men and women were significantly and positively correlated on measures of specificity of vulnerable disclosures, avoidant attachment, perceived responsiveness, perceived punishment,

and perceived reinforcement. The correlations between men and women's anxious attachment and between men and women's mindfulness were non-significant.

Next, correlations between the women's predictor variables and the outcomes were examined. Perceived responsiveness and partner-inclusiveness were significantly negatively correlated; therefore, women perceived lower responsiveness when disclosing vulnerabilities higher in partner inclusiveness. This relation was also seen for specificity; women perceived lower responsiveness when their disclosures were more specific. Women's avoidant attachment and perceived responsiveness were significantly negatively correlated meaning that women who had higher avoidant attachment perceived their partners as less responsive. Anxious attachment was significantly positively related to perceived punishment; therefore, women with higher anxious attachment perceived their partners as more punishing. Mindfulness and perceived punishment were significantly negatively correlated meaning that women who were more mindful perceived their partners as less punishing.

Next, correlations between the men's predictor variables and the outcomes were examined. Perceived responsiveness and men's anxious attachment and perceived responsiveness and avoidant attachment were significantly negatively correlated; therefore, men perceived lower responsiveness when they were higher in avoidant attachment and higher in anxious attachment. Men's perceived punishment was not significantly correlated with any of their predictors. Perceived reinforcement and attachment showed the same relationship as perceived responsiveness and attachment style for men.

Outcome variables had moderate to strong correlations in the expected

directions for men and women. Perceived punishment was negatively correlated with perceived responsiveness and reinforcement, and perceived responsiveness and reinforcement were positively correlated.

Lastly, correlations between predictor variables for women and men were examined. Specificity and partner-inclusiveness of vulnerable disclosures were positively correlated for women. Attachment anxiety and avoidance were significantly correlated and positive for both men and women. Mindfulness was negatively correlated with anxious attachment for men and women, and mindfulness and avoidant attachment were significantly negatively correlated for men.

Table 3

Correlations among qualities of vulnerable disclosures, attachment dimensions, mindfulness, and perceived partner responding

	1	2	3	4	5	6	7	8
1 Partner-inclusiveness	.86**	-.02	-.03	-.08	.12	-.19	.21	-.09
2 Specificity	.25*	.43**	.10	-.01	.17	-.18	-.02	-.12
3 Anxious Attachment	-.05	-.20	.20	.58**	-.35**	-.36**	.19	-.26*
4 Avoidant Attachment	-.06	-.05	.46**	.24*	-.24*	-.51*	.18	-.30**
5 Mindfulness	.26*	.20	-.39**	-.20	.19	-.05	-.16	-.01
6 Perceived Responsiveness	-.30**	-.24*	-.18	-.30**	.09	.40**	-.50**	.69**
7 Perceived Punishment	.10	.03	.23*	.21	-.29**	-.49**	.30**	-.59**
8 Perceived Reinforcement	-.25*	-.22	-.27*	-.40**	.18	.83**	-.56*	.29**

Note. Correlations among measures of men's variables are above the diagonal and correlations among measures of women's variables are below the diagonal. Correlations between men and women's measures of the same construct are on the diagonal in bold. Partner-inclusiveness = the random assignment. The correlation between men and women is not 1.00 because some individuals discussed the incorrect topic, which was corrected after the manipulation check.

+ $p < .10$. * $p < .05$. ** $p < .01$

Analytic Strategy

Prior to conducting analyses, a test of distinguishability was conducted using multilevel modeling techniques in SPSS 21.0 (Kenny, 2013). In order to examine whether couple members were distinguishable by gender, two models were estimated (one in which members were distinguishable and one in which members were indistinguishable by gender) for each specific hypothesis. The maximum likelihood deviance of the more complex model (distinguishable) was subtracted from the maximum likelihood deviance of the simpler model (indistinguishable). That

difference is distributed as chi square under the null hypothesis that the dyad-members are indistinguishable by gender. A significant chi-square provides evidence that the model in which dyad-members are differentiated by their gender provides a better fit for the data. Findings of the tests of distinguishability suggested that dyad-members could be treated as indistinguishable by gender in all models except for Hypothesis 4. The tests of distinguishability are displayed in Table 4.

Table 4
Test of distinguishability for all study hypotheses

Indistinguishable			Distinguishable			<i>p</i>
Parameters	-2 Log Likelihood		Parameters	-2 Log Likelihood	Chi-Square	
H1: 6	720.461		11	716.425	4.036	0.54
H2: 6	448.224		11	442.888	5.336	0.38
H3: 6	375.241		11	366.481	8.760	0.12
H4: 11	706.233		20	687.289	18.944	0.03
H5: 11	428.729		20	419.748	8.981	0.44
H6: 18	357.428		35	330.483	26.945	0.06
H7: 10	710.616		15	701.077	9.539	0.09
H8: 10	440.053		15	429.616	10.437	0.06
H9: 10	366.029		15	355.620	10.409	0.06

All hypotheses in the present research study were tested using multilevel modeling techniques in SPSS 21.0 using the MIXED procedure with heterogeneous compound symmetry (Kenny, Kashy, & Cook, 2006). This procedure was used to examine dyadic data (i.e., data in which one person is connected to one other person in the dataset). Specifying models with heterogeneous compound symmetry removes the assumption of homogeneous variances between males and females. In dyadic data analysis there are three primary types of variables— within-dyad variables, between-

dyad variables, and mixed variables. For within-dyad variables, variation exists among the individuals in the dyad but not across dyads. That is, every dyad has the same score on a within-dyad variable. For example, in the present study, gender is a within-dyad variable. Because our participants are heterosexual couples, each dyad consists of a male and female. Therefore, for gender, there is variation within the dyad but not between dyads because each dyad has the same sum of scores on this variable. For between-dyad variables, variation in scores exists between the dyads. Therefore, both individuals in the dyad have the same score on a variable and these scores are different than other dyads in the sample. For example, length of cohabitation with partner is a between-dyad variable. This score should be the same between members of the same dyad but different than other dyads in the sample. Finally, mixed variables have variation both within and between dyads. Continuous variables are typically mixed variables because they often vary both between and within dyads. Examples of mixed variables in the present study include attachment style, mindfulness, specificity, perceived responsiveness, and perceived reinforcement and punishment during vulnerable discussions. The present study analyzed mixed variables for both indistinguishable and distinguishable dyads (by gender). These methods account for the non-independence of data provided by couples and allow for the examination of mutual influences between dyad members. However, in indistinguishable models, gender is not included, because it was not found to be a distinguishing variable. In order to examine dyadic influence, we can estimate the discloser effect or the partner effect as hypothesized in different models. The discloser effect (typically called the actor effect in actor-partner interdependence

models; Kenny et al., 2006) is the effect of the discloser's own predictor on his or her own outcome and a partner effect is the effect of an individual's partner's predictor on the discloser's outcome. In the present study an example of a discloser effect is the effect of an individual's vulnerable disclosure on their perceived responsiveness and a partner effects is the effect of the partner's avoidant attachment on the discloser's perceived responsiveness.

In order to examine hypotheses using SPSS, a pairwise dataset was created. A single equation was estimated for both individuals within a single dyad. The single equation can include an individual's own predictors and the partner predictors as hypothesized. An example of a pairwise equation includes the outcome variable (Y), the discloser variable (X), and the partner variable (X'). The equation for person i in dyad j is:

$$Y_{ij} = b_0 + b_1X_{ij} + b_2X'_{ij} + e_{ij}$$

To test the hypotheses, I estimated nine primary models. All predictors were mean-centered prior to conducting analyses. For each model, predictors included the appropriate discloser and/or partner effects and the proposed interactions. Analyses proceeded as follows: First the hypothesized model was estimated. Second, if interactions were non-significant, an iterative process was followed whereby the highest order non-significant interaction term was dropped and the model was rerun (Kenny et al., 2006). For hypothesis four, gender effects were examined by including gender as a moderator (Kenny et al., 2006). Lastly, procedures outlined by Aiken and West (1991) were used to probe the simple slopes of significant interaction effects.

Primary Analyses

Aim 1: Provide support for an expansion of intimacy process theory elucidating two specific qualities of vulnerability disclosures (i.e., partner-inclusiveness and specificity) that influence intimacy process outcomes.

Hypothesis 1: Partner-inclusiveness was expected to be negatively associated with perceived responsiveness for disclosures that were more specific. Perceived responsiveness was the outcome variable of interest. Predictor variables included discloser partner-inclusiveness and discloser specificity. The two-way interaction term was discloser partner-inclusiveness with discloser specificity.

Model results are shown in Table 5. As hypothesized, there was a significant two-way interaction between partner-inclusiveness and specificity ($b = -2.86$, $SE = 1.28$, $p = .028$). Therefore, the simple effects of partner-inclusiveness were examined at two additional levels of specificity. Consistent with expectations, partner-inclusiveness was related to lower perceived responsiveness during discussions with higher specificity ($b = -1.93$, $SE = .70$, $p = .006$), but not during discussions with lower specificity ($b = .001$, $SE = .61$, $n.s.$). Simple slopes are shown in Figure 2.

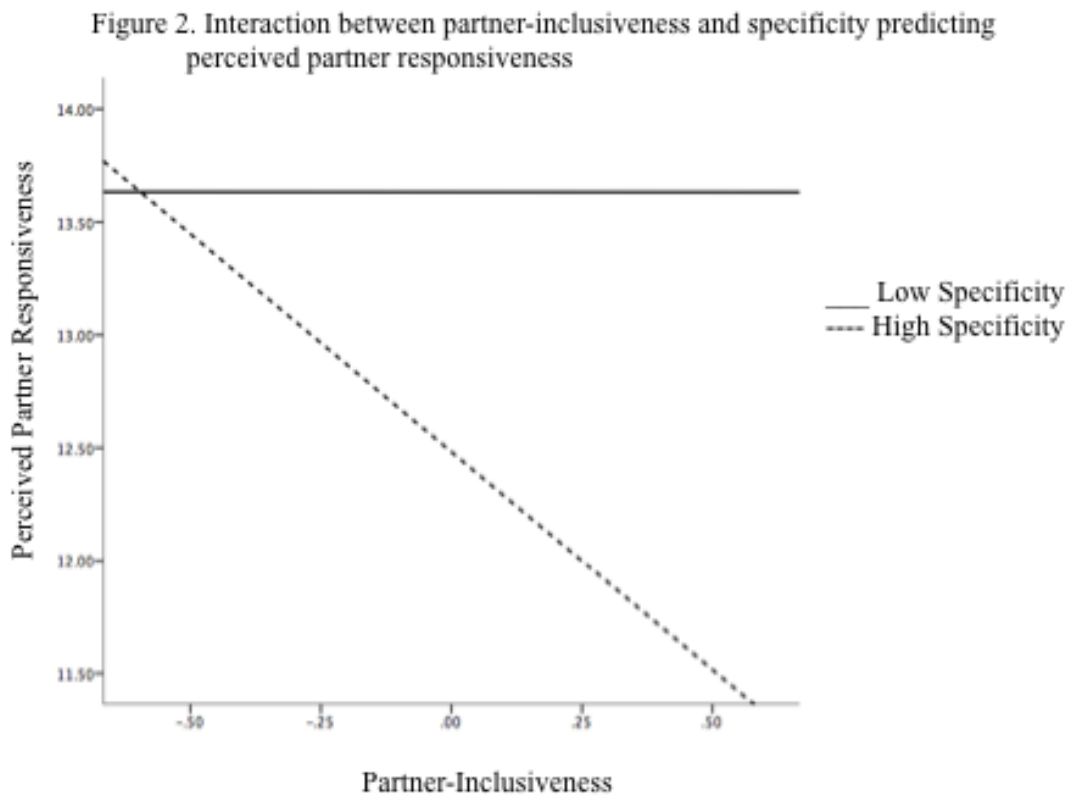
Table 5

Partner-inclusiveness and specificity predicting perceived partner responsiveness

Predictors	b (95% CI)	SE
Inclusiveness	-0.97 (-1.91, 0.03)	0.49
Specificity	-1.70* (-3.06, -0.36)	0.66
Inclusiveness *Specificity	-2.85* (-5.51, -0.34)	1.28

Note. All predictors were mean-centered. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = the composite score representing whether the discloser gave specific examples during the discussion or was more general.

*** $p < .001$; ** $p < .01$, * $p < .05$



Hypothesis 2: Partner-inclusiveness was expected to be negatively associated with perceived reinforcement for disclosures that were more specific. Perceived reinforcement was the outcome variable of interest. Predictor variables included discloser partner-inclusivity and discloser specificity. The two-way interaction term was discloser partner-inclusivity with discloser specificity.

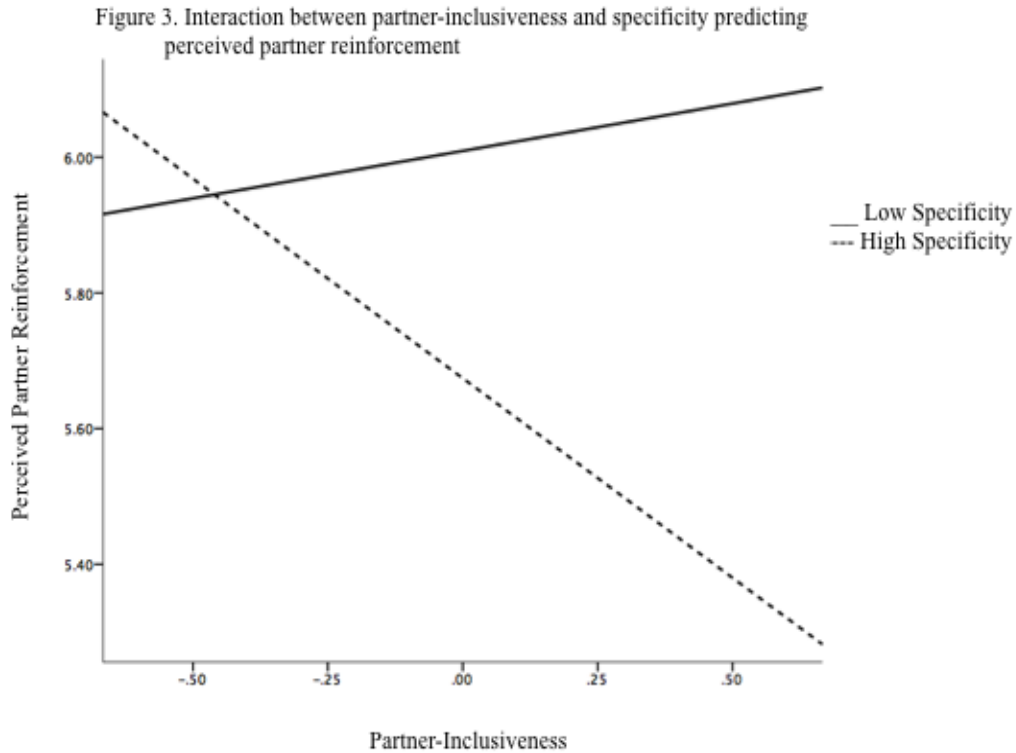
Model results are shown in Table 6. There was a significant two-way interaction between partner-inclusiveness and specificity ($b = -1.07$, $SE = .53$, $p = .046$). Therefore, the simple effects of partner-inclusiveness were examined at two additional levels of specificity. Consistent with expectations, partner-inclusiveness was related to lower perceived responsiveness during discussions with higher specificity ($b = -.58$, $SE = .27$, $p = .035$), but not during discussions with lower specificity ($b = .14$, $SE = .25$, $n.s.$). Simple slopes are shown in Figure 3.

Table 6
Partner-inclusiveness and specificity predicting perceived partner reinforcement

Predictors	b (95% CI)	SE
Inclusiveness	0.22 (-0.60, 0.15)	0.19
Specificity	-0.51 (-1.04, 0.02)	0.27
Inclusiveness* Specificity	-1.07* (-2.12, -0.02)	0.53

Note. All predictors were mean-centered. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = the composite score representing whether the discloser gave specific examples during the discussion or was more general.

*** $p < .001$; ** $p < .01$, * $p < .05$



Hypothesis 3: Partner-inclusiveness was expected to be positively associated with perceived punishment for disclosures that were more specific. Perceived punishment was the outcome variable of interest. Predictor variables included discloser partner-inclusiveness and discloser specificity. The two-way interaction term was discloser partner-inclusiveness with discloser specificity.

Model results are shown in Table 7. There was a significant two-way interaction between partner-inclusiveness and specificity ($b = .89, SE = .42, p = .035$). Therefore, the simple effects of partner-inclusiveness were examined at two additional levels of specificity. Consistent with expectations, partner-inclusiveness was related to higher perceived punishment during discussions with higher specificity ($b = .59, SE = .22, p = .007$), but not during discussions with lower specificity ($b = -.01, SE = .20, n.s.$). Simple slopes are shown in Figure 4.

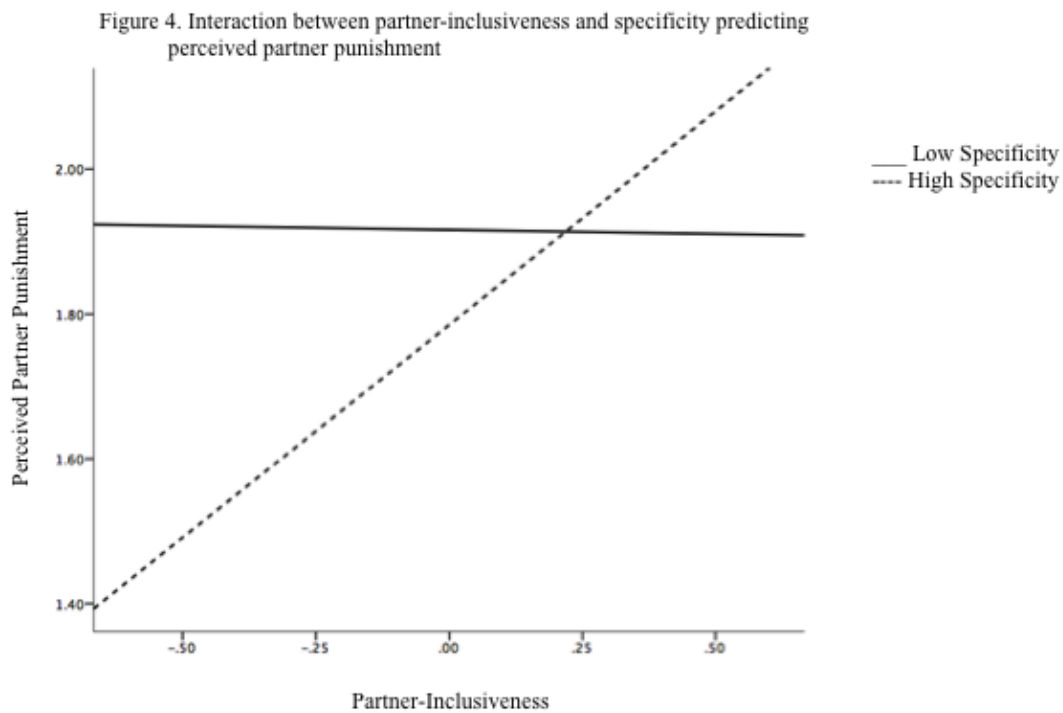
Table 7

Partner-inclusiveness and specificity predicting perceived partner punishment

Predictors	b (95% CI)	SE
Inclusiveness	0.29 (-0.01, 0.59)	0.15
Specificity	-0.19 (-0.61, 0.23)	0.21
Inclusiveness* Specificity	0.89* (0.06, 1.71)	0.42

Note. All predictors were mean-centered. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = the composite score representing whether the discloser gave specific examples during the discussion or was more general.

*** $p < .001$; ** $p < .01$, * $p < .05$



Analyses to Address Specific Aim 2: To examine how individual differences in emotion regulation impact the proposed expanded intimacy process model.

Hypothesis 4: Partner-inclusiveness was expected to have a stronger negative association with perceived responsiveness when disclosures were specific and partners had higher avoidant attachment compared to when partners who had lower avoidant attachment.

Perceived responsiveness was the outcome variable of interest. Predictor variables included discloser partner-inclusiveness, discloser specificity, partner avoidant attachment, and partner anxious attachment. Two-way interaction terms included: discloser partner-inclusiveness with discloser specificity; discloser partner-inclusiveness with partner avoidant attachment; and discloser specificity with partner avoidant attachment. The three-way interaction was discloser partner-inclusiveness with discloser specificity and partner avoidant attachment. Because the test of distinguishability was significant for this model, gender was included as a distinguishing variable and was therefore included as a moderator.

The final model is displayed in Table 8. The four-way interaction between gender, discloser partner-inclusiveness, discloser specificity, and partner avoidant attachment was significant ($b = -.33$, $SE = .16$, $p = .048$). Therefore, the effects of partner-inclusiveness were examined at two additional levels of specificity and partner avoidant attachment for males and females. Partner-inclusiveness was related to lower perceived responsiveness for women during higher specificity ($b = -3.06$, $SE = 1.13$, $p = .009$) and lower specificity ($b = -3.30$, $SE = 1.24$, $p = .01$) disclosures when their partners had higher avoidant attachment. Surprisingly, partner-

inclusiveness was related to higher perceived responsiveness for men during lower specificity disclosures when their partners had higher avoidant attachment ($b = 2.56$, $SE = 1.17$, $p = .033$). Partner-inclusiveness was not related to perceived responsiveness for men or women during low specificity disclosures when partners had lower avoidant attachment ($b = 0.45$, $SE = 0.76$, $n.s.$) and ($b = 0.95$, $SE = 1.17$, $n.s.$), or for men or women during high specificity disclosures when their partners had lower avoidant attachment ($b = -1.23$, $SE = 1.24$, $n.s.$) and ($b = -0.79$, $SE = 1.10$, $n.s.$). Finally, partner-inclusiveness was not related to perceived responsiveness for men during high specificity disclosures when partners had higher avoidant attachment ($b = -2.46$, $SE = 2.03$, $n.s.$). Simple slopes are shown in Figure 5.

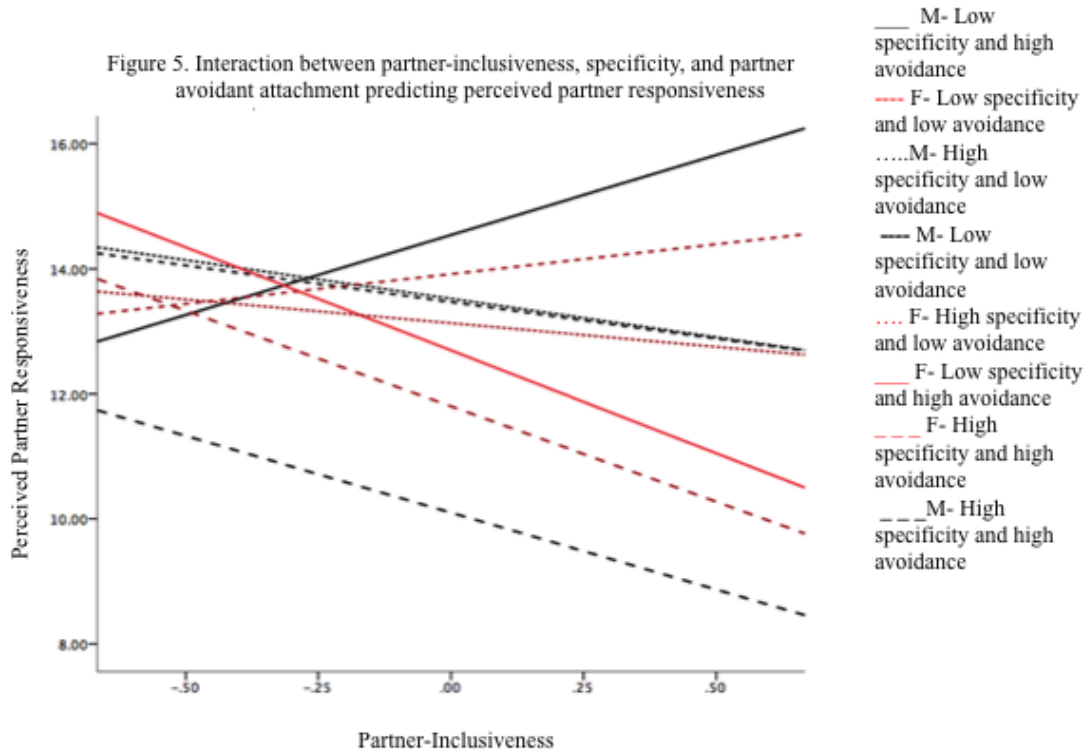
Table 8

Partner-inclusiveness, specificity, and partner attachment style predicting perceived partner responsiveness

Predictors	b (95% CI)	SE
Gender	-0.13 (-0.87, 0.60)	0.37
Inclusiveness	-1.49 (-2.67, -0.31)	0.59
Specificity	-1.52 (-3.16, 0.12)	0.82
Avoidant	-0.05* (-0.08, -0.01)	0.02
Anxious	0.02 (-0.002, 0.04)	0.01
Gender*Inclusiveness	1.14 (-0.38, 2.66)	0.76
Gender*Specificity	1.95 (-4.34, 0.45)	1.20
Gender*Avoidant	0.003 (-0.05, 0.05)	0.03
Inclusiveness*Specificity	-0.77 (-4.03, 2.49)	1.63
Inclusiveness*Avoidant	-0.09** (-0.16, -0.02)	0.03
Specificity*Avoidant	-0.03 (-0.13, 0.08)	0.05
Gender*Inclusiveness *Specificity	-2.92** (-7.83, -1.99)	2.47
Gender*Inclusiveness *Avoidant	0.15** (0.04, 0.25)	0.05
Gender*Specificity *Avoidant	-0.19* (-0.36, -0.03)	0.08
Inclusiveness*Specificity *Avoidant	0.08 (-0.12, -0.29)	0.10
Gender*Inclusiveness *Specificity*Avoidant	-0.33* (-0.66, -0.003)	0.16

Note. All predictors were mean-centered. Anxious attachment was included as a covariate in the model. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = The composite score representing whether the discloser gave specific examples during the discussion or was more general.

*** $p < .001$; ** $p < .01$, * $p < .05$



Hypothesis 5: Partner-inclusiveness was expected to have a stronger negative association with perceived reinforcement when disclosures were specific and partners had higher avoidant attachment compared to partners who had lower avoidant attachment.

Perceived reinforcement was the outcome variable of interest. Predictor variables included discloser partner-inclusiveness, discloser specificity, partner avoidant attachment, and partner anxious attachment. Two-way interaction terms included: discloser partner-inclusiveness with discloser specificity; discloser partner-inclusiveness with partner avoidant attachment; and discloser specificity with partner avoidant attachment. The three-way interaction was discloser partner-inclusiveness with discloser specificity and partner avoidant attachment.

All models are displayed in Table 9. The three-way interaction between discloser partner-inclusiveness, discloser specificity, and partner avoidant attachment was not significant ($b = -.03$, $SE = .03$, ns). Therefore, the three-way interaction was dropped from the model and the model was rerun. The two-way interaction between discloser specificity and partner avoidant attachment was significant ($b = -.04$, $SE = .02$, $p = .04$); all other two-way interactions were non-significant and were dropped from the model.

Because the two-way interaction between discloser specificity and partner avoidant attachment was significant, the simple effects of discloser specificity were examined at two additional levels of partner avoidant attachment. Higher specificity was related to lower perceived reinforcement when partners had higher avoidant attachment ($b = -1.46$, $SE = 0.40$, $p < .001$), but not when partners had lower avoidant attachment ($b = .001$, $SE = .35$, $n.s.$). Simple slopes are shown in Figure 6.

Table 9

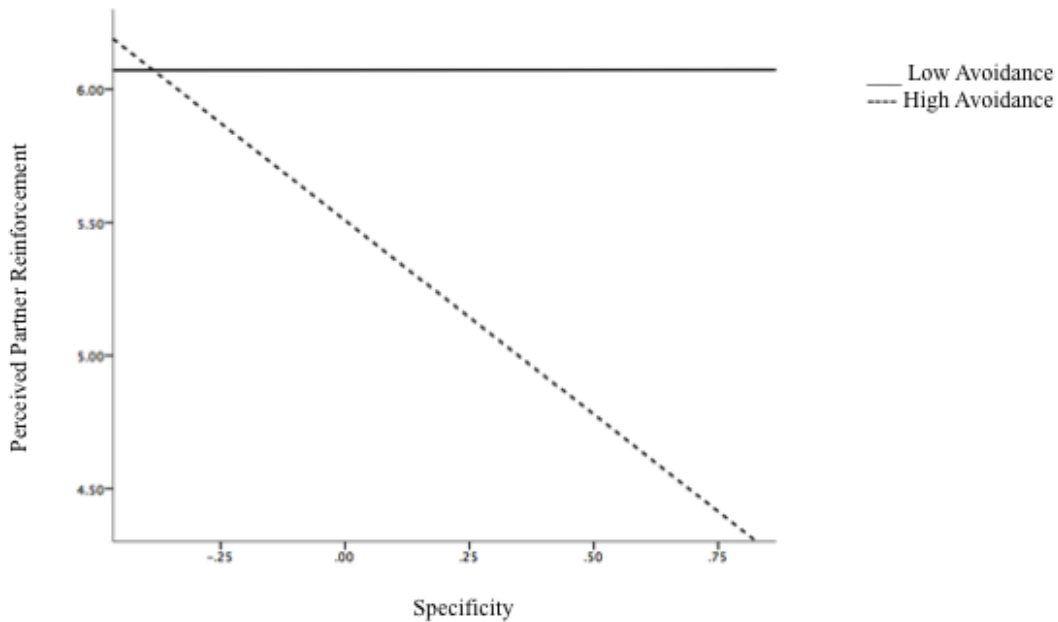
Partner-inclusiveness, specificity, and partner attachment style predicting perceived partner reinforcement

Predictors	Model 1		Model 2		Model 3	
	b	SE	b	SE	b (95% CI)	SE
Inclusiveness	-0.21	0.18	-0.20	0.18	-0.14 (-0.50, 0.22)	0.18
Specificity	-0.62*	0.26	-0.62*	0.26	-0.72** (-1.24, -0.20)	0.26
Avoidant	-0.02**	0.01	-0.02***	0.006	-0.02*** (-0.03, -0.01)	0.006
Anxious	0.005	0.005	0.005	0.005	0.007 (-0.002, 0.02)	0.005
Inclusiveness*	-0.98	0.52	-0.91	0.51	---	---
Specificity						
Inclusiveness*	-0.02	0.01	-0.02	0.01	---	---
Avoidant						
Specificity*	-0.04*	0.02	-0.04*	0.02	-0.05** (-0.08, -0.01)	0.02
Avoidant						
Inclusiveness*	-0.03	0.03	---	---	---	---
Specificity*						
Avoidant						

Note. All predictors were mean-centered. Anxious attachment was included as a covariate in the model. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = the composite score representing whether the discloser gave specific examples during the discussion or was more general.

*** $p < .001$; ** $p < .01$, * $p < .05$

Figure 6. Interaction between partner-inclusiveness and partner avoidant attachment predicting perceived partner reinforcement



Hypothesis 6: Partner-inclusiveness was expected to have a stronger positive association with perceived punishment when disclosures were specific and partners had higher anxious and lower avoidant attachment compared to partners with all other attachment styles.

Perceived punishment was the outcome variable of interest. Predictor variables include discloser partner-inclusiveness, discloser specificity, partner avoidant attachment, and partner anxious attachment. Two-way interaction terms included: discloser partner-inclusiveness with discloser specificity; discloser partner-inclusiveness with partner avoidant attachment; discloser partner-inclusiveness with partner anxious attachment; discloser specificity with partner avoidant attachment; discloser specificity with partner anxious attachment; and attachment avoidance with attachment anxiety. Three way interactions included discloser partner-inclusiveness with discloser specificity and partner avoidant attachment; discloser partner-

inclusiveness with discloser specificity and partner anxious attachment; discloser partner-inclusiveness with partner anxious attachment and partner avoidant attachment; discloser specificity with partner anxious attachment and partner avoidant attachment. The four-way interaction was discloser partner-inclusiveness with discloser specificity and partner anxious attachment and partner avoidant attachment.

All models are displayed in Table 10. The four-way interaction between discloser partner-inclusiveness, discloser specificity, partner avoidant attachment, and partner anxious attachment was not significant ($b = -0.0007$, $SE = .002$, ns).

Therefore, the four-way interaction was dropped from the model and the model was rerun. All of the three-way interactions were not significant and were therefore dropped from the model and the model was rerun. The only significant two-way interaction was between discloser partner-inclusiveness and specificity, which was examined in Hypothesis 3; all other two-way interactions were non-significant.

Table 10

Partner-inclusiveness, specificity, and partner attachment style predicting perceived partner punishment

	Model 1		Model 2		Model 3	
Predictors	b	SE	b	SE	b (95% CI)	SE
Inclusiveness	0.41*	0.21	0.39*	0.17	0.30 (-0.004, 0.59)	0.15
Specificity	0.09	0.35	0.11	0.28	-0.09 (-0.52, 0.34)	0.22
Avoidant	.01	0.005	.01	0.005	.01 (0.001, 0.02)	0.005
Anxious	-0.002	0.005	-0.002	0.004	-0.001 (-0.01, 0.01)	0.004
Inclusiveness*	1.43*	0.70	1.25**	0.46	1.02* (0.17, 1.87)	0.43
Specificity						
Inclusiveness*	0.01	0.01	0.01	0.01	0.01 (-0.01, 0.03)	0.01
Avoidant						
Inclusiveness*	0.0004	0.008	-0.0003	0.008	0.001 (-0.01, 0.02)	0.007
Anxious						
Specificity*	-0.006	0.03	-0.003	0.02	-0.008 (-0.05, 0.03)	0.02
Avoidant						
Specificity*	0.03*	0.02	0.03*	0.01	0.02 (-0.003, -0.04)	0.01
Anxious						
Avoidant*	-0.0002	0.0003	-0.0003	0.0002	-0.0001 (-0.0004, -0.0003)	0.0002
Anxious						
Inclusiveness*	0.03	0.05	0.03	0.04	---	---
Specificity*						
Avoidant						
Inclusiveness*	0.02	0.03	0.02	0.03	---	---
Specificity*						
Anxious						
Inclusiveness*	-0.0005	0.0006	-0.0006	0.0004	---	---
Avoidant*						
Anxious						
Specificity*	-0.0004	0.0008	-0.0004	0.0006	---	---
Avoidant*						
Anxious						
Inclusiveness*	-0.0007	0.002	---	---	---	---
Specificity*						
Avoidant*						
Anxious						

Note. All predictors were mean-centered. Anxious attachment was included as a covariate in the model. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = the composite score representing whether the discloser gave specific examples during the discussion or was more general. *** $p < .001$; ** $p < .01$, * $p < .05$

Hypothesis 7: Partner-inclusiveness was expected to be negatively associated with perceived responsiveness when disclosures were specific and partners had lower mindfulness compared to when partners had higher mindfulness.

Perceived responsiveness was the outcome variable of interest. Predictor variables included discloser partner-inclusiveness, partner mindfulness, and discloser specificity. Two-way interaction terms included: discloser partner-inclusiveness with discloser specificity; discloser partner-inclusiveness with partner mindfulness; discloser specificity with partner mindfulness. The three-way interaction was discloser partner-inclusiveness with discloser specificity and partner mindfulness.

Results are shown in Table 11. The three-way interaction between discloser partner-inclusiveness, discloser specificity, and partner mindfulness was significant ($b = 3.18, SE = 1.45, p = .030$). Therefore, the simple effects of partner-inclusiveness were examined at two additional levels of specificity and partner mindfulness. Consistent with expectations, partner-inclusiveness was related to lower perceived responsiveness during discussions with higher specificity when partners had lower mindfulness ($b = -3.33, SE = .90, p < .001$), but not during discussions with higher specificity when partners had higher mindfulness ($b = -.74, SE = 0.98, n.s.$), or lower specificity with lower mindfulness ($b = .49, SE = .80, n.s.$) or higher mindfulness ($b = -.58, SE = .86, n.s.$). Simple slopes are shown in Figure 7.

Table 11

Partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner responsiveness

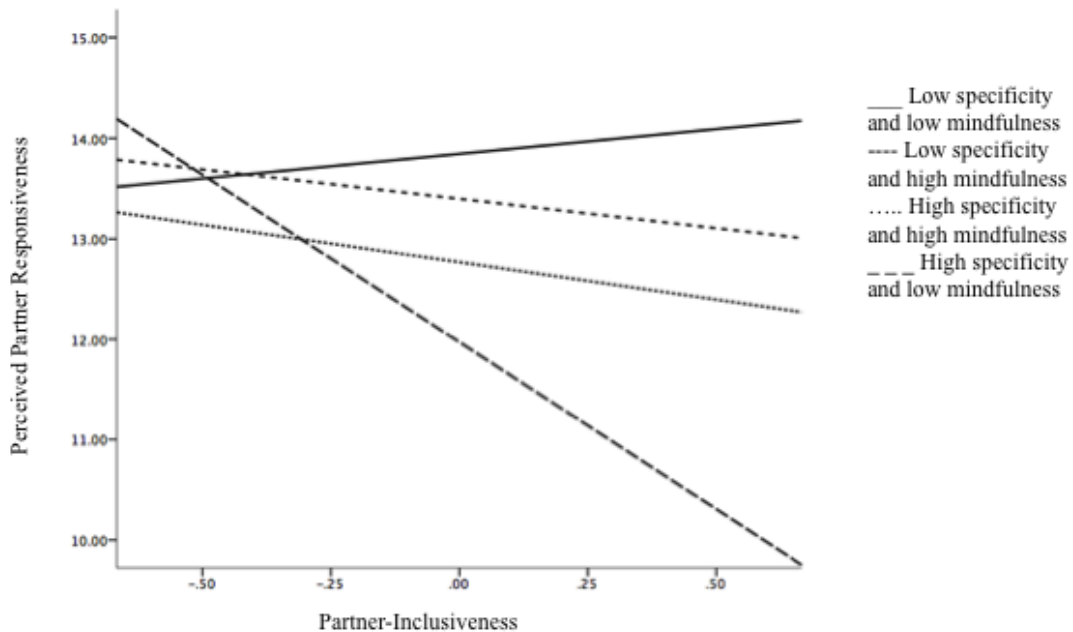
Predictors	b (95% CI)	SE
Inclusiveness	-1.04* (-1.98, -0.10)	0.48
Specificity	-1.85** (-3.11, -0.59)	0.64
Mindfulness	0.10 (-0.38, 0.58)	0.24
Inclusiveness *Specificity	-2.95* (-5.40, -0.50)	1.24
Inclusiveness *Mindfulness	0.44 (-0.53, 1.41)	0.49
Specificity *Mindfulness	1.08 (-0.34, 2.50)	0.72
Inclusiveness*Specificity *Mindfulness	3.18* (0.32, 6.05)	1.45

Note. All predictors were mean-centered. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = the composite score representing whether the discloser gave specific examples during the discussion or was more general.

Mindfulness = partner's trait mindfulness

*** $p < .001$; ** $p < .01$, * $p < .05$

Figure 7. Interaction between partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner responsiveness



Hypothesis 8: Partner-inclusiveness was expected to be negatively associated with perceived reinforcement when disclosures were specific and partners had lower mindfulness compared to when partners had higher mindfulness.

Perceived reinforcement was the outcome variable of interest. Predictor variables included discloser partner-inclusivity, partner mindfulness, and discloser specificity. Two-way interaction terms included: discloser partner-inclusivity with discloser specificity; discloser partner-inclusivity with partner mindfulness; discloser specificity with partner mindfulness. The three-way interaction was discloser partner-inclusivity with discloser specificity and partner mindfulness.

All models are shown in Table 12. The three-way interaction between discloser partner-inclusiveness, discloser specificity, and partner mindfulness was not significant ($b = .62$, $SE = .63$, ns). Therefore, the three-way interaction was dropped from the model and the model was rerun with the two-way interactions. The two-way interaction between discloser partner-inclusiveness and partner mindfulness was not significant ($b = .18$, $SE = .21$, ns) and was therefore dropped from the model. The two-way interaction between discloser specificity and partner mindfulness was significant ($b = .73$, $SE = .30$, $p = .016$). Therefore, the simple effects of discloser specificity were examined at two additional levels of partner mindfulness. Higher specificity was related to higher perceived reinforcement when partners had higher mindfulness ($b = -1.12$, $SE = .38$, $p = .004$), but not when partners had lower mindfulness ($b = -.04$, $SE = .36$, $n.s.$). Simple slopes are shown in Figure 7.

Table 12

Partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner reinforcement

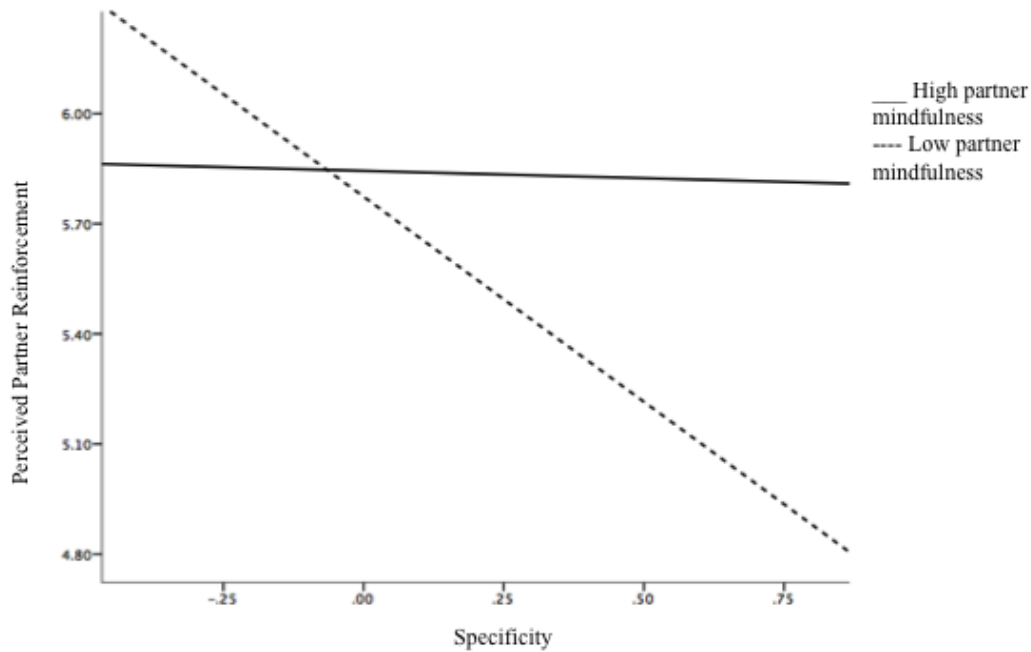
Predictors	Model 1		Model 2		Model 3	
	b	SE	b	SE	b (95% CI)	SE
Inclusiveness	-0.28*	0.19	-0.28*	0.19	-0.29* (-0.67, 0.08)	0.19
Specificity	-0.56*	0.27	-0.54*	0.28	-0.52 (-1.04, 0.01)	0.27
Mindfulness	0.06	0.10	0.08	0.10	0.08 (-0.12, 0.28)	0.10
Inclusiveness* Specificity	-1.11*	0.53	-1.14*	0.53	-1.16* (-2.20, -0.11)	0.53
Specificity* Mindfulness	0.62*	0.31	0.69*	0.30	0.73* (0.13, 1.32)	0.30
Inclusiveness* Mindfulness	0.20	0.21	0.18	0.21	---	---
Inclusiveness* Specificity *Mindfulness	0.62 (-0.62, 1.86)	0.63	---	---	---	---

Note. All predictors were mean-centered. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = the composite score representing whether the discloser gave specific examples during the discussion or was more general.

Mindfulness = partners trait mindfulness

*** $p < .001$; ** $p < .01$, * $p < .05$

Figure 8. Interaction between specificity and partner mindfulness predicting perceived partner reinforcement



Hypothesis 9: Partner-inclusiveness was expected to be positively associated with perceived punishment when disclosures were specific and partners had lower mindfulness compared to when partners had higher mindfulness.

Perceived punishment was the outcome variable of interest. Predictor variables included discloser partner-inclusivity, partner mindfulness, and discloser specificity. Two-way interaction terms included: discloser partner-inclusivity with discloser specificity; discloser partner-inclusivity with partner mindfulness; discloser specificity with partner mindfulness. The three-way interaction was discloser partner-inclusivity with discloser specificity and partner mindfulness.

All models are shown in Table 13. The three-way interaction between discloser partner-inclusiveness, discloser specificity, and partner mindfulness was not significant ($b = -.40$, $SE = .45$, ns). Therefore, the three-way interaction was dropped

from the model and the model was rerun with the two-way interactions. The two-way interaction between discloser partner-inclusiveness and partner mindfulness was not significant ($b = -.27$, $SE = .16$, ns) and was dropped from the model. The two-way interaction between discloser specificity and partner mindfulness was significant ($b = -.53$, $SE = .24$, $p = .025$).

However, when examining the model for the simple effects of discloser specificity and partner mindfulness (i.e., a model with discloser specificity, partner mindfulness, and the two-way interaction term as predictors) the interaction was no longer significant and therefore simple effects were not explored ($b = -.43$, $SE = .24$, $n.s.$).

Table 13

Partner-inclusiveness, specificity, and partner mindfulness predicting perceived partner punishment

Predictors	Model 1		Model 2		Model 3	
	b	SE	b	SE	b (95% CI)	SE
Inclusiveness	0.31*	0.15	0.31*	0.15	0.33* (0.03, 0.62)	0.15
Specificity	-0.12	0.21	-0.14	0.21	-0.18 (-0.59, 0.24)	0.21
Mindfulness	0.05	0.08	0.04	0.08	0.05 (-0.11, 0.21)	0.08
Inclusiveness* Specificity	0.89*	0.41	0.91*	0.41	0.92* (0.10, 1.74)	0.42
Specificity* Mindfulness	-0.43	0.24	-0.48*	0.24	-0.53* (-0.99, -0.07)	0.24
Inclusiveness* Mindfulness	-0.27	0.16	-0.25	0.16	---	---
Inclusiveness* Specificity *Mindfulness	-0.45	0.49	---	---	---	---

Note. All predictors were mean-centered. Inclusiveness = dichotomous variable representing random assignment of partner-inclusive or partner-exclusive discussion. Specificity = the composite score representing whether the discloser gave specific examples during the discussion or was more general.

Mindfulness = partners trait mindfulness

*** $p < .001$; ** $p < .01$, * $p < .05$

Discussion

Intimacy is important for individual and relationship health. Therefore, understanding the factors that contribute to and interfere with creating intimacy is imperative. The purpose of the present study was to examine whether the content of vulnerable disclosures, and the specificity with which that content is described, influence the way a partner responds. This research specifically examined disclosures that implicate the partner in causing vulnerability and vulnerable disclosures that do

not involve the partner. Additionally, this research examined whether a partner's ineffective emotion regulation strategies interfere with effective responding.

Interpretation of Results

The first aim of this research was to provide support for an expansion of intimacy process theory by elucidating two specific qualities of vulnerable disclosures (i.e., partner-inclusiveness and specificity) that should influence intimacy process outcomes. This research drew from two intimacy process models -- The Interpersonal Process Model of Intimacy (Reis & Shaver, 1988) and a Behavioral Interpretation of Intimacy (Cordova & Scott, 2001) -- and therefore examined perceived partner responsiveness and perceived partner reinforcement and punishment. There were three hypotheses in service of the first aim. Specifically, individuals whose disclosures implicated the partner in creating their feelings of vulnerability (i.e., partner-inclusive disclosures) and provided specific examples of that vulnerability would experience (1) lower perceived responsiveness, (2) lower perceived reinforcement, and (3) higher perceived punishment from their partners compared to individuals whose disclosures did not implicate the partner (i.e., partner-exclusive disclosures). All three hypotheses were supported.

These findings suggest that vulnerable disclosures that implicate the partner, and provide specific examples of that vulnerability, influence proximal outcomes of the intimacy process differently compared to specific disclosures of partner-exclusive vulnerability. Vulnerable disclosures that were not specific did not have a differential impact on proximal outcomes of the intimacy process.

These findings are in line with research on relationship transgressions and attachment theory, which suggest that partner-inclusive disclosures should be difficult for the partner to respond to supportively because the discloser and the partner both experience vulnerability (Fraley & Shaver, 2000; Vangelisti, 2001). In the present research, a male participant provided the following example of a partner-inclusive vulnerability: He shared a specific time that he felt ashamed and embarrassed when his partner “made fun” of him in front of their friends. He said “even though you think it’s just a joke, it makes me not trust what you will say in public, and so I don’t want to spend time with you around our friends.” Several factors are at play during this exchange— all of which make it difficult for the partner to be responsive and reinforcing and make punishment of the disclosure more likely. First, the man was emotionally hurt by his partner’s actions. Research suggests feeling hurt by a partner’s actions impacts individuals’ beliefs about the trustworthiness and availability of the partner (Feeney, 2005). Therefore, in addition to feeling vulnerable when entering the discussion, he may also feel sadness, fear (Vangelisti & Young, 2000), anxiety (Leary & Springer, 2001), or anger (Fitness, 2001). Second, because he is implicating the partner in causing emotional pain, the partner then feels her own discomfort and vulnerability. This challenges her ability to respond supportively since she will be motivated to reduce her own attachment related distress (Fraley & Shaver, 2000). Instead, she is likely to respond defensively in order deflect blame for the incident thereby attempting to relieve responsibility for causing her partner pain (Gottman, 1999) in an effort to reduce her own negative emotional experience

(Becker et al., 2008). This interaction is likely to be perceived by the discloser as being limited in responsiveness and reinforcement and high in punishment.

In comparison, intimacy theories clearly explicate why a partner-exclusive disclosure is likely to promote more responsiveness, reinforcement, and less punishment. A partner-exclusive disclosure is one that does not implicate the partner in any way. An example of a partner-exclusive disclosure from this research was when a woman shared that she feels helpless and inadequate because she is not able to be present for her mother who is currently sick. This willingness to share vulnerable feelings and thoughts communicates trust and a desire to connect (Reis & Shaver, 1988) and therefore pulls for high responsiveness and reinforcement. Because the partner is unlikely to feel vulnerable or threatened in this situation, punishment of the disclosure is less likely.

As hypothesized, these results were only found for disclosures that were specific as opposed to those that did not provide specific examples of the vulnerability. Although different than specificity, emotional depth of disclosures has been found to elicit greater responsiveness during personal disclosures (Reis & Shaver, 1988). Emotional disclosures are more strongly associated with feelings of intimacy compared to disclosures of more general facts (Laurenceau et al., 1998). This research found that greater specificity during partner-exclusive disclosures was associated with higher perceived responsiveness. Similar to emotional depth, disclosures that provide specific examples of vulnerability (not caused by the partner) may draw the partner closer to the discloser's experience. Furthermore, the findings that specific partner-exclusive disclosures were associated with higher reinforcement

and lower punishment provides additional support for specificity within the Behavioral Interpretation of Intimacy (Cordova & Scott, 2001).

However, until now, research has not examined how specificity influences partners' responses during partner-inclusive vulnerable disclosures. This research found that disclosers tended to perceive lower responsiveness and reinforcement and higher punishment when they provided specific examples of hurt caused by the partner. Providing specific examples of vulnerability may make the transgression and hurt more concrete; therefore, the partner may feel more threatened and defensive. Indeed, defensiveness occurs when a person feels attacked regarding relational concerns (Becker et al., 2008). However, a disclosure may seem less important if the discloser does not remember specific details. The partner may feel less threatened in response to a more general disclosure and be less self-protective.

The second aim of this research was to examine how individual differences in emotion-regulation impact the expanded intimacy process model. There were six hypotheses examining the second aim. Three hypotheses examined the influence of the partner's attachment style and three hypotheses examined the influence of the partner's mindfulness.

The fourth hypothesis was that partner-inclusiveness would be negatively associated with lower perceived responsiveness when disclosures were specific and partners had higher avoidant attachment compared to partners who had lower avoidant attachment. This hypothesis was partially supported for women.

Women perceived lower responsiveness during partner-inclusive disclosures when their partners had higher avoidant attachment (during both higher and lower

specificity disclosures). When highly avoidant individuals detect attachment related distress, such as the distress brought about during a partner-inclusive disclosure, their primary goal is to deactivate the attachment behavioral system by withdrawing from or dismissing the interaction (Fraley & Shaver, 2000). Simpson and colleagues (2011) suggest that an effective way to deactivate the attachment system is to actually work to *not* understand what the discloser is feeling and thinking and therefore evade the associated distress. Interestingly, their research has found that highly avoidant individuals are less accurate when interpreting their partner's feelings and thoughts during discussions about relationship problems (i.e., intimacy or jealousy), regardless of problem severity (Simpson et al., 2011). They suggest this is because avoidant partners tune out and try *not* to understand what their partners are feeling and thinking as a way to protect themselves. If avoidant individuals withdraw and therefore do not listen to or understand their partner's thoughts and emotions, it should clearly be harder to provide supportive responsiveness.

This result was only found for women. Research has found that women tend to value emotional connection more than men (Cancian, 1985). Women also tend to believe that support and understanding are more important in relationships compared to men (Burleson, Kunkel, Samter, & Werking, 1996). Because women value emotional closeness and understanding, an avoidant male partner may seem particularly unresponsive. Women would desire more closeness during these relationship-stressing discussions, and an avoidant partner's withdrawal would seem more extreme.

Interestingly, men perceived their more avoidant (female) partners to be more responsive when discussing less specific partner-inclusive disclosures. Thus, it appeared that for men with higher attachment avoidant partners, presenting partner-inclusive disclosures in a less specific way might engender greater intimacy. Nevertheless, this finding was contrary to expectations, thus it should be interpreted with caution.

The fifth hypothesis was that partner-inclusive disclosures would be associated with lower perceived reinforcement when disclosures were specific and partners had higher avoidant attachment compared to partners who had lower avoidant attachment. This hypothesis was not supported. Rather, individuals who disclosed more specific vulnerabilities and had partners with higher avoidant attachment perceived lower reinforcement compared to individuals who disclosed more specific vulnerabilities and had partners with lower avoidant attachment. Partner-inclusiveness did not interact with specificity and partner avoidant attachment to predict perceived partner reinforcement, which may reflect the discomfort that more avoidantly attached partners feel in any caregiving role. That is, specific disclosures, whether they are partner-inclusive or partner-exclusive, create a situation in which the discloser feels vulnerable and requires caregiving. Therefore, these discussions threaten a more avoidant partner's independence. In response, a more avoidant partner is likely to withdraw in order to manage attachment related distress and maintain their sense of autonomy. A more avoidant partner would have difficulty providing any supportive reinforcement. Additionally, research has found that more avoidantly attached individuals tend to prefer *not* learning new information about

their partner's private thoughts and emotions (Rholes, Simpson, Tran, Martin, and Friedman, 2007). If their goal is to avoid learning new information, it makes sense that avoidant individuals would not reinforce these disclosures. By not reinforcing vulnerable disclosures, future disclosures are less likely to occur and the more avoidant partner is less likely to learn new information. Another possibility for this finding is that disclosers perceive their partners as less reinforcing during specific disclosures because *they* feel more vulnerable. Disclosers are therefore more sensitive to the presence or absence of reinforcement. More avoidantly attached partners may provide limited reinforcement regardless of specificity. However, when disclosers share specific examples of hurt, feel more vulnerable, and are not reinforced by their more avoidant partners, they may *perceive* their partners as less reinforcing. Future research should use behavioral observations of reinforcement in addition to individuals' perceptions of their partners' reinforcing behavior to clarify these associations.

The sixth hypothesis was that partner-inclusiveness would have a stronger positive association with perceived punishment when disclosures were specific and partners had higher anxious and lower avoidant attachment compared to partners with all other attachment styles. This hypothesis was not supported.

The seventh hypothesis was that partner-inclusive disclosures would be negatively associated with perceived responsiveness when disclosures were specific and partners had lower mindfulness compared to partners who had higher mindfulness. This hypothesis was supported. Individuals perceived lower responsiveness when their partners had lower mindfulness and they were disclosing

more specific, partner-inclusive vulnerabilities. There was no relation between partner-inclusiveness and perceived partner responsiveness when partners had higher mindfulness or during less specific disclosures. Individuals with lower mindfulness tend to be easily pulled out of the present moment by negative thoughts and emotions (Bishop et al., 2004), which would be prevalent during a specific, partner-inclusive disclosure. Therefore, partners with lower mindfulness should be more affected by the discomfort that is brought about during the discussion and attend to their own feelings. These partners should find it particularly challenging to react supportively to the discloser and would therefore be less responsive. However, those with higher mindfulness are better able to regulate their distressing emotions by interpreting thoughts and emotions as temporary (Ryan et al., 2007). In doing so, these individuals are better able to manage the discomfort during any type of disclosure their partner makes.

Hypothesis eight proposed that partner-inclusive disclosures would be negatively associated with perceived reinforcement when disclosures were specific and partners had lower mindfulness compared to partners who had higher mindfulness. This hypothesis was not supported. Instead, individuals perceived lower reinforcement when their partners had lower mindfulness and they were disclosing more specific vulnerabilities. Partner-inclusiveness did not interact with specificity and partner's mindfulness to predict perceived partner reinforcement. Partners typically reinforce disclosures by validating the experiences (Cordova & Scott, 2001). When an individual provides specific examples during a disclosure there will undoubtedly be more information to attend to, understand, and validate. Individuals

with higher mindfulness have better attentiveness (Allen et al., 2012) and are better able to identify the nuances shared during vulnerable disclosures. Those with low mindfulness may become distracted during interpersonal conversations. As discussions become more specific, partners with lower mindfulness may miss important pieces of the interaction. As a result, they would be unable to reinforce those disclosures. Inability to reinforce the discloser for sharing specific experiences would certainly lead to lower perceived reinforcement. Those with higher mindfulness should be able to attend to specific disclosures and thus provide more reinforcement.

Hypothesis nine proposed that partner-inclusive disclosures would be positively associated with perceived punishment when disclosures were specific and partners had lower mindfulness compared to partners who had higher mindfulness. Support for this hypothesis was not found.

Summary of Findings

This research found support for an expanded intimacy process model that includes partner-inclusiveness and specificity as key components. Additionally, this research found that avoidant attachment style and mindfulness influence the expanded model. Explicitly, disclosers perceived lower responsiveness and reinforcement and higher punishment when disclosing specific examples of vulnerability that implicated the partner in causing hurt. Comparatively, when disclosing specific examples of vulnerabilities that were not associated with partners, disclosers perceived higher responsiveness, reinforcement, and lower punishment.

Regarding attachment style, women perceived less responsiveness during partner-inclusive disclosures when men (their partners) had higher avoidant attachment but not when partners had lower avoidance. Additionally, both men and women perceived lower reinforcement during disclosures characterized by more specific examples when their partners had higher avoidant attachment but not lower avoidance. Overall, avoidant attachment appeared to interfere with two proximal outcomes of intimacy (responsiveness and reinforcement).

Regarding mindfulness, individuals perceived lower responsiveness when disclosing more specific, partner-inclusive vulnerabilities when their partners had lower mindfulness but not when partners had higher mindfulness. Additionally, individuals perceived lower reinforcement when disclosing more specific vulnerabilities and their partners had lower mindfulness but not when their partners had higher mindfulness. Overall, having lower mindfulness appeared to interfere with one's ability to stay present and provide supportive responsiveness and reinforcement.

The hypotheses for perceived punishment were not supported for attachment style or mindfulness. Specifically, these hypotheses proposed that partner-inclusive disclosures would be positively associated with perceived punishment when disclosures were specific and partners had lower mindfulness (or high anxious and low avoidant attachment) compared to when partners had higher mindfulness (or all other attachment styles). The fact that these hypotheses were not supported may be due to issues of power, which is discussed further in the limitations section.

Strengths and Limitations

This research makes several novel contributions to the field of couple research. First, this research is theoretically driven and builds upon existing models of intimacy. Current intimacy process models suggest that vulnerable disclosures promote partner responsiveness and therefore increase intimacy for couples. Drawing from research on relationship transgressions and attachment theory, this research identified limitations in current intimacy process models that do not differentiate between partner-inclusive and partner-exclusive vulnerable disclosures. Indeed, this research established that disclosing specific examples of vulnerabilities that were caused by the partner function in a way that likely decreases rather than increases intimacy. The Interpersonal Process Model of Intimacy (Reis & Shaver, 1988) highlights the positive impact of disclosing greater emotional depth. However, intimacy models do not discuss the impact of specificity. Specificity is a construct that warrants further investigation – particularly given its impact during partner-inclusive vulnerable disclosures.

Second, this research developed a novel couple discussion task intended to evoke vulnerability from both individuals. Roberts and Greenberg (2002) created a discussion prompt designed to elicit vulnerability from the discloser and promote responsiveness and intimacy. Building from their work, the instructions were modified for the partner-inclusive condition with the intent of disclosing hurt caused by the partner and increasing vulnerability for both individuals. One previous study utilized a discussion task designed to evoke vulnerability from both partners (Khalifian & Barry, 2016). In this study, couples identified and discussed a

transgression that had occurred in their relationship. However, this research did not compare the discussion to one that was meant to elicit intimacy. Therefore, definite conclusions could not be drawn regarding whether this type of vulnerability functions differently compared to a partner-exclusive disclosure. In contrast, the present research specifically compared vulnerability discussions in which the partner was implicated to those in which the partner was not implicated.

A related and third strength of this research is the experimental manipulation of partner-inclusiveness. Couples were randomly assigned to discuss either partner-inclusive or partner-exclusive vulnerabilities. This allows for greater causal inferences regarding the influence of partner-inclusiveness on intimacy processes.

Fourth, this study used a manipulation check to verify that participants adhered to the experimental directions and couples discussed their assigned vulnerability. By using a randomization check, this research can more confidently assert that partner-inclusive and partner-exclusive discussions influence intimacy process outcomes differently. One previous study examined intimacy following vulnerable disclosures in which the discloser either discussed a time when their partner caused hurt feelings or a time when someone other than their partner hurt their feelings (Mitchell et al., 2008). These authors did not find a difference in feelings of intimacy across conditions; however, the authors did not perform a manipulation check and therefore cannot be sure that couples discussed their assigned condition. Indeed, we found that 6.7% of our sample discussed the opposite of their random assignment. This is the first study to use a manipulation check to verify the content of

partner-inclusive and partner-exclusive discussions and confirm that these disclosures influence proximal outcomes of intimacy differently.

Fifth, the use of dyadic analyses enabled both discloser (actor) and partner effects to be examined in analyses in a theoretically driven manner. Specifically, partner effects of attachment and mindfulness were examined as moderators in the relations between the actor effects (i.e., vulnerable disclosure, specificity, and perceived partner responsiveness, reinforcement, and punishment). Rather than examining all within-person effects (all actor effects), researchers stress the importance of examining partner influence. Theory suggests that the partner's emotion regulatory factors should influence how that partner responds during the discussion. Indeed, attachment theory states that insecurely attached individuals will experience more attachment related distress during vulnerable discussions. Therefore, they will have more difficulty engaging with their partner in a way that promotes intimacy. As a result, these individuals will be perceived as less responsive, less reinforcing, and more punishing. Based on theory, the partner's attachment style is most likely to influence that partner's actual behavior. Simply examining how the discloser's own attachment influences one's own experience would discount the partner. This research supports the request from attachment theorists to examine the interpersonal processes of attachment between couples (Koback, 1994). However, the discloser's own attachment style is also likely to influence his perception. Furthermore, the discloser and partner's attachment styles may interact to influence how the discussion is perceived. These examinations are beyond the scope of this

study but are interesting extensions of this work and should be examined in future research.

Sixth, this research included cohabiting, engaged, and married couples and was fairly representative of young adult relationships with regard to relationship status. About 60% of our sample was comprised of cohabiting couples, which is an important population to include given the high rates at which couples are currently living together before marriage. Indeed, one of the largest shifts couples researchers have seen in recent decades is the pronounced increase in rates of premarital cohabitation, with over half of all young adults cohabiting with a romantic partner (Goodwin, Mosher, & Chandra, 2010; Schoen, Landale, & Daniels, 2007; Seltzer, 2004). Given this increase, is important to include these couples in relationship research.

This study also had several potentially limiting aspects related to design and sample that should be discussed along with study strengths. First, this research utilized self-report data of perceived partner responsiveness, perceived reinforcement, and perceived punishment. Intimacy theories state that perceived responsiveness is the most important factor contributing to feelings of intimacy (Lin, 1992; Reis & Shaver, 1988). Furthermore, perceived response is based on the partner's actual response. For example, it is unlikely that a discloser will perceive their partner as reinforcing if the partner is belittling and criticizing. However, as proposed in the discussion, it is possible that one's perception may not be completely in line with reality. For example, a partner could be equally withdrawn in discussions characterized by high and low specificity, but the discloser might perceive the partner

as less reinforcing during specific discussions. This discrepancy could be because the discloser has different expectations for reinforcement and feels more vulnerable during more specific disclosures. Therefore, even though the partner may behave similarly during both discussions, he would be perceived as less reinforcing during the specific discussion due to the disclosers sensitivity. Of course, this is speculation. The way to test these hypotheses would be to obtain both self-report and observational data. Overall, self-report data provides insights about what the discloser is thinking and feeling, which cannot be obtained through observation. Therefore, self-report data is necessary; however, observational data would provide more information and would clarify nuanced questions about the contribution of actual behavior and the perception of behavior.

Second, this research is cross-sectional and conducted in a laboratory setting. Therefore, we cannot tell how these processes influence intimacy over time in naturalistic settings. Intimacy theories state that it is the accumulation of responsiveness and reinforcement (and lack of punishment) over time that leads to feelings of intimacy. Understating how these processes influence intimacy over time could be done through daily diary examinations.

Third, due to sample size, there may have been inadequate power to detect some interaction effects. One previous study examining interactions between similar variables (i.e., mindfulness, attachment, trust, intimacy, and disengagement) found significant interactions with a sample of 81 participants (Khalifian & Barry, 2016). Furthermore, the sample size in this study is similar to most other research examining dyadic interactions. However, moderation analyses tend to be underpowered and

therefore I may have obtained some non-significant results due sample size. These hypotheses should be examined with a larger sample in the future.

Fourth, participants were recruited through advertisements on a university campus. Study recruitment targeted university community members (i.e., students, faculty, staff, and visitors). Therefore, the sample is comprised primarily of middle class, college-educated, young adults. Research with middle aged and older adults have found that many relationship patterns that begin early in relationships (e.g., pressure, blame, and withdrawal) remain stable over time; however avoidance behaviors increase (Holley, Haase, & Levenson, 2013). Therefore, older couples may be more avoidant of vulnerability discussions, but may fall into similar destructive patterns when discussions do arise. Further, research with low-income couples highlights additional stressors outside of the relationship, such as living situations and health issues, which exacerbate relationship distress. These stressors are at the forefront of couples' minds and interfere with their ability to navigate relationship challenges (Jackson et al., 2016). Therefore, lower-income populations, with additional stressors, may have more difficulty engaging in and effectively communicating during vulnerability discussions. Thus, these findings should be further examined with additional samples to better understand how these processes function across different populations.

Theoretical and Clinical Implications

This research expands current intimacy theories by illuminating two qualities of vulnerable disclosures that influence intimacy process outcomes – partner-inclusiveness and specificity. Current intimacy theories state that vulnerable

disclosure met with responsiveness, reinforcement, and lack of punishment lead to feelings of intimacy. However, those theories do not discuss how partner-inclusive vulnerable disclosures should function in distinct ways. This research shows that disclosures that implicate the partner in causing hurt actually lead to lower responsiveness, reinforcement, and higher punishment, which is detrimental to intimacy development. Furthermore, this research found that disclosing specific examples of emotional hurt during partner-inclusive discussions leads to reduced responsiveness and reinforcement and increased punishment. When examining intimacy processes, future research should take into account the content of vulnerable disclosures—particularly whether or not the disclosure involves the partner.

Regarding attachment theory, this research examined a specific type of discussion meant to elicit attachment related distress from both the discloser and the partner. Attachment theorists are interested in examining how attachment styles influence interpersonal processes (Kobak, 1994). This research is particularly relevant because it is a dyadic exchange that activates the attachment behavioral system. A partner-inclusive disclosure threatens the security of the relationship and the partner's independence. Therefore, partner-inclusive disclosures should be especially difficult for avoidant partners to respond to in a supportive way, which is indeed what we found. Future research should examine how the discloser's attachment style influences his own perception and also how individuals' attachment styles interact to promote or hinder healthy engagement. This discussion task is relevant for any researchers who are interested in examining interpersonal processes during an interaction that evokes attachment related distress.

This study also contributes to research examining the positive impact of mindfulness during interpersonal exchanges. Research has primarily focused on the positive influence that mindfulness has on physical (e.g., Kok, Waugh, & Fredrickson, 2013) and mental health (e.g., Davis & Hayes, 2011; Keng, Smoski, & Robins, 2011). Researchers have also examined associations between mindfulness and relationship satisfaction and communication (e.g., Wachs & Cordova, 2007). Treatments have been developed to teach couples mindfulness as a tool that contributes to healthy interpersonal functioning (Carson, Carson, Gil, & Baucom, 2004). However, this is the first study to examine the impact of mindfulness during an experimental study of vulnerability during interpersonal exchanges. Mindfulness appears to promote healthy engagement during vulnerable discussions while lower mindfulness interferes with responsiveness and reinforcement.

There are also several clinical implications of the current research. Couple therapies encourage discussions of vulnerability. However, this is the first study to examine how vulnerable disclosures that implicate the partner in feelings of hurt function differently compared to disclosures that do not involve the partner. Couples often attend therapy after a transgression; therefore, many discussions occurring during couple therapy will involve relational hurt. It is imperative that couple therapists better understand how these disclosures influence intimacy processes in order to better serve couples. When rebuilding intimacy, this research suggests that couples should perhaps start with partner-exclusive vulnerability discussions, which are more likely to increase feelings of closeness. These disclosures are easier to respond to and therefore couples can practice and become more effective with

responsiveness and reinforcement. Then, couples may be better equipped to provide empathic responding during partner-inclusive disclosures. Couples should be guided through partner-inclusive vulnerability discussions initially in treatment. It would not be recommended to have partner-inclusive vulnerable discussions at home because these conversations are likely to make intimacy development more difficult and may exacerbate couple distress.

Furthermore, couple therapies stress the importance of describing specific examples of hurt and related emotions, rather than discussing relationship difficulties generally (e.g., Baucom, Shoham, Muser, Daiuto, & Stickle, 1998; Markman, Stanley, & Blumberg, 1994). These therapies suggest that couples have more difficulty addressing and solving a relationship problem if it is described in a general way. However, this research suggests that specificity may make effective responding more difficult during partner-inclusive vulnerability discussions. Partners may have more difficulty responding to a specific partner-inclusive disclosure because they feel attacked or helpless to change the past. Specificity warrants further examination—particularly if therapies encourage couples to disclose hurt in this manner. It may be especially important to make sure that couples have developed effective responding skills before encouraging them to have specific partner-inclusive vulnerability discussions outside of therapy.

These findings also suggest that it may be helpful to tailor couple treatment depending on couple-members' attachment styles. Thus, attachment style should be assessed prior to starting treatment. This research found that securely attached individuals provided the same level of responsiveness and reinforcement (and lack of

punishment) across conditions. Securely attached couples are better equipped to navigate vulnerable discussions in a way that will increase intimacy. These couples would not need the same guidance when discussing vulnerabilities and would likely navigate them well on their own. However, more avoidantly attached individuals were perceived by their partners as providing less supportive responsiveness during specific, partner-inclusive disclosures. More avoidantly attached partners were also perceived as less reinforcing during specific disclosures. Psychoeducation about attachment styles and associated behavioral patterns may be helpful prior to having vulnerable discussions. Moreover, this research suggests that dyads with an avoidant individual should initially aim to discuss vulnerabilities in treatment rather than at home. If vulnerable discussions occur outside of therapy, avoidant individuals will likely withdraw, which could be detrimental for intimacy.

Therapies focused on promoting secure attachment should be useful for couples who have experienced a relationship transgression, particularly if one or both partners have an insecure attachment style. Emotion Focused Couples Therapy (EFT; Johnson, 2004) proposes that expression of emotional vulnerability is necessary for building closeness in romantic relationships. Indeed, relationship satisfaction is decreased when individuals suppress or try to control emotional expression (Feeney, 1999; Feeney, Noller, & Roberts, 1998). Therefore, EFT focuses on identifying and connecting with key emotional experiences and then modifying or expanding those experiences. In doing so, couples develop new interaction patterns and greater ability to express and respond to vulnerable emotions, thus promoting more secure attachment bonds (Johnson, 2004).

McKinnin and Greenberg (2017) conducted a study with couples attending EFT who had experienced a relationship transgression. They found that expression of vulnerability about the transgression combined with supportiveness from the partner predicted improved forgiveness, resolution, trust, and relationship satisfaction for the injured partner. These results suggest that EFT is a therapeutic option that may help couples navigate partner-inclusive vulnerability discussions and promote responsiveness and intimacy. However, Mikinnin and Greenberg (2017) did not assess for attachment style; therefore, it is unknown whether these results would generalize to couples who have insecure attachment.

Finally, this research supports the idea that mindfulness (an emotion regulation tool) can be used during distressing couple interactions to maintain healthy engagement. Learning mindfulness skills may improve couples' ability to provide supportive responsiveness and reinforcement during partner-inclusive vulnerable disclosures. One experimental study examined the benefits of Mindfulness-Based Relationship Enhancement (MBRE; Carson, Carson, Gil, & Baucom, 2004), a mindfulness program designed to enhance the relationships of relatively content couples. MBRE is an 8-week intervention delivered in a group format. Sessions are 2.5 hours once per week and there is one full-day session. Dyadic mindfulness practices include eye-gazing, mindful touch, loving-kindness meditation, and partner yoga. Couples also discuss communication styles and engage in communication exercises. Individuals who participated in MBRE, relative to controls, had significantly greater relationship satisfaction, autonomy, acceptance, and lower personal and relationship distress following the intervention and at 3-months follow-

up. This research suggests that mindfulness can be taught with the goal of improving relationship functioning.

Conclusions and Future Directions

This research found that the content of vulnerable disclosures indeed influences partner responding patterns, which are known to effect intimacy. Explicitly, disclosing specific thoughts and feelings related to times a person felt vulnerability (e.g., hurt, embarrassment, or shame) unrelated to the partner resulted in higher responsiveness and reinforcement and lower punishment. These findings are in line with current intimacy theories, which state that disclosing vulnerable thoughts and feelings related to the inner-most-self promotes intimacy between individuals. Expanding upon these models, this research also examined partner-inclusive disclosures and found that disclosing specific thoughts and feelings related to *times that the partner caused vulnerability* resulted in lower responsiveness and reinforcement and higher punishment. Further, this research examined how partners' emotion-regulation (i.e., attachment style and mindfulness) influenced this expanded model. Partner's avoidant attachment and lower mindfulness were found to interfere with their ability to provide supportive responsiveness and reinforcement.

This research has created possibilities for future theoretical examinations and clinical applications. This research suggests that the influence of specificity deserves further examination – particularly given its current role and encouragement in couple therapies. An important extension of this work would be a daily-diary examination of partner-inclusive and partner-exclusive interactions. Interesting questions would be:

- 1) how often are partner-inclusive and partner-exclusive disclosures occurring in

couples' daily interactions, 2) do we see the same pattern of responding to partner-inclusive and partner-exclusive disclosures in naturalistic settings, 3) do secure attachment and mindfulness continue to promote responsiveness to specific partner-inclusive disclosures outside of the laboratory 4) are there other partner characteristics besides secure attachment and mindfulness that facilitate effective responding, and 5) do individuals experience changes in intimacy overtime based on how partners respond to these vulnerable disclosures.

Regarding clinical applications, relationship transgressions are common and push many couples to seek therapy. Unfortunately, research focused on understanding and treating transgressions is still limited. Relationship transgressions, such as betrayal and infidelity, are particularly difficult to treat. Findings from this research suggest that interventions designed to enhance secure attachment and mindfulness may help couples navigate partner-inclusive vulnerability discussions. A treatment that incorporates components of EFT and mindfulness should help couples identify their deep vulnerable thoughts and emotions, disclose them in an effective way, and then respond to and reinforce vulnerability. Using these skills during partner-inclusive vulnerability discussions should be helpful for connecting and overcoming past hurt. If disclosure of vulnerability is consistently reinforced then intimacy is likely to develop and the couple should be able to move past the transgression. Of course, new partner-inclusive vulnerabilities will arise and these conversations will continue to occur. However, if the couple has developed a more secure attachment bond and can use mindfulness skills during their conversations then partner-inclusive discussions provide an opportunity to practice their skills and promote intimacy.

Appendices

Appendix A

Partner-exclusive Vulnerability Priming Instructions

We will be asking you to share with each other what we call vulnerabilities—things that we feel insecure about, things that we don't like about ourselves, things that we've done that we feel badly about—any kind of feeling or experience we've had that has caused us some pain or hurt. Please select a vulnerability that has occurred outside of your relationship— rather than something your partner has caused. For example, please exclude vulnerabilities that your partner has made you feel insecure or bad about. Common feelings related to vulnerability include: Shame, guilt, dissatisfaction with self, dissatisfaction with another, hurt, incompetence, betrayal, pain, sadness, fear, and rejection. What I'd like you to do right now is take about 10 minutes to try to focus on these feelings, writing down some of your thoughts as a way of helping you focus on them. You may want to try to remember what it was that brought on the feeling of vulnerability, what situations bring it up for you now, how you feel, why you feel that way, and so on. What you write down is not important; we just want to make sure you are ready to talk to each other. We've found that it is a good idea for you to focus on one or two things rather than to try to make a list of things. Choose one that is most important in your life now and write about your feelings

Appendix A (continued)

Partner-inclusive Vulnerability Priming Instructions

We will be asking you to share with each other what we call partner-inclusive vulnerabilities—things that your partner has done to make you feel insecure, sad, embarrassed, or unwanted. Any situation that has been directly related to your partner that has caused you some pain or hurt. Common feelings related to partner-inclusive vulnerabilities include: Shame, guilt, dissatisfaction with self, dissatisfaction with another, hurt, incompetence, betrayal, pain, sadness, fear, and rejection. What I'd like you to do right now is take about 10 minutes to try to focus on these feelings, writing down some of your thoughts as a way of helping you focus on them. You may want to try to remember what it was that brought on the feeling of vulnerability, what situations bring it up for you now, how you feel, why you feel that way, and so on. What you write down is not important; we just want to make sure you are ready to talk to each other. We've found that it is a good idea for you to focus on one or two things rather than to try to make a list of things. Choose one that is most important in your life now and write about your feelings.

Appendix B

Perceived Partner Responsiveness

Please respond to the following questions thinking about **the discussion you just had** with your partner

	very slightly or not at all	a little	moderately	quite a bit	extremely
During the discussion , to what extent did you feel ...					
accepted by your partner?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
understood by your partner?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
cared for by your partner?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix C

Perceived Partner Punishing and Reinforcing Behaviors

During the discussion you just had with your partner, how much did your partner engage in the following behaviors?

My partner...		never	rarely	some- times	half the time	frequently	almost always	always
1.	agreed with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	said something mean.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	made me feel that my viewpoint was valuable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	raised his/her voice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	was considerate toward me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	told me that I was doing something to cause the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	said something kind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	argued.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	defended his/her position.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10.	politely talked about his/her feelings. ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	corrected my statements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	criticized me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	carefully listened so he/she could understand me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	discussed the issue calmly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix D

Experiences in Close Relationships – Revised (ECR-R)

Please think about **how you typically are in romantic relationships** and respond to the following statements.

	Strongly disagree					Strongly agree	
1. I'm afraid that I will lose my partner's love.....	1	2	3	4	5	6	7
2. My desire to be very close sometimes scares people away.....	1	2	3	4	5	6	7
3. My romantic partner makes me doubt myself.....	1	2	3	4	5	6	7
4. I often worry that my partner will not want to stay with me.....	1	2	3	4	5	6	7
5. My partner really understands me and my needs.....	1	2	3	4	5	6	7
6. I feel comfortable sharing my private thoughts and feelings with my partner.....	1	2	3	4	5	6	7
7. I often worry that my partner doesn't really love me.....	1	2	3	4	5	6	7
8. I tell my partner just about everything.....	1	2	3	4	5	6	7
9. It's easy for me to be affectionate with my partner.....	1	2	3	4	5	6	7
10. I talk things over with my partner.....	1	2	3	4	5	6	7
11. I worry a lot about my relationships.....	1	2	3	4	5	6	7
12. I find that my partners don't want to get as close as I would like.....	1	2	3	4	5	6	7
13. I find it easy to depend on romantic partners.....	1	2	3	4	5	6	7

Appendix D (continued)

	Strongly disagree					Strongly agree	
14. When my partner is out of sight, I worry that he or she might become interested in someone else.....	1	2	3	4	5	6	7
15. It's not difficult for me to get close to my partner.....	1	2	3	4	5	6	7
16. I often wish that my partner's feelings for me were as strong as my feelings for him or her.....	1	2	3	4	5	6	7
17. I find it relatively easy to get close to my partner.....	1	2	3	4	5	6	7
18. I worry that romantic partners won't care about me as much as I care about them.....	1	2	3	4	5	6	7
19. I feel comfortable depending on romantic partners.....	1	2	3	4	5	6	7
20. Sometimes romantic partners change their feelings about me for no apparent reason.....	1	2	3	4	5	6	7
21. I usually discuss my problems and concerns with my partner.....	1	2	3	4	5	6	7
22. I worry that I won't measure up to other people.....	1	2	3	4	5	6	7
23. I am nervous when partners get too close to me.....	1	2	3	4	5	6	7
24. I rarely worry about my partner leaving me.....	1	2	3	4	5	6	7

Appendix D (continued)

	Strongly disagree				Strongly agree		
25. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.....	1	2	3	4	5	6	7
26. I get uncomfortable when a romantic partner wants to be very close.....	1	2	3	4	5	6	7
27. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.....	1	2	3	4	5	6	7
28. I do not often worry about being abandoned.....	1	2	3	4	5	6	7
29. I prefer not to be too close to romantic partners.....	1	2	3	4	5	6	7
30. It makes me mad that I don't get the affection and support I need from my partner.....	1	2	3	4	5	6	7
31. I am very comfortable being close to romantic partners.....	1	2	3	4	5	6	7
32. I prefer not to show a partner how I feel deep down.....	1	2	3	4	5	6	7
33. My partner only seems to notice me when I'm angry.....	1	2	3	4	5	6	7
34. I find it difficult to allow myself to depend on romantic partners.	1	2	3	4	5	6	7
35. I don't feel comfortable opening up to romantic partners.....	1	2	3	4	5	6	7
36. It helps to turn to my romantic partner in times of need.....	1	2	3	4	5	6	7

Appendix E

Mindful Attention Awareness Scale (MAAS)

Below is a collection of statements about your everyday experience. Using the 1–6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be.

	Almost always					Almost never
37. I could be experiencing some emotion and not be conscious of it until some time later.....	1	2	3	4	5	6
38. I break or spill things because of carelessness, not paying attention, or thinking of something else.....	1	2	3	4	5	6
39. I find it difficult to stay focused on what's happening in the present.	1	2	3	4	5	6
40. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.....	1	2	3	4	5	6
41. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.....	1	2	3	4	5	6
42. I forget a person's name almost as soon as I've been told it for the first time.....	1	2	3	4	5	6
43. It seems I am "running on automatic" without much awareness of what I'm doing.....	1	2	3	4	5	6

44. I rush through activities without being really attentive to them.....	1	2	3	4	5	6
45. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.....	1	2	3	4	5	6
46. I do jobs or tasks automatically, without being aware of what I'm doing.	1	2	3	4	5	6
47. I find myself listening to someone with one ear, doing something else at the same time.....	1	2	3	4	5	6

Appendix F

Vulnerability Coding Sheet Example

Male ID	Female ID	Whose Discussion	Discussion Topic- Section 1	Partner-inclusiveness - Section 1	Specificity - Section 1	Discussion Topic- Section 2	Partner-inclusiveness- Section 2	Specificity - Section 2
1	2	1	Feels like he is incompetent. Gives examples from school	1	1	Continues examples from school of feeling incompetent	1	1
1	2	2	She is self conscious about gaining weight, has social anxiety.	1	1	More detail on feeling anxiety in social interactions	1	1

Discussion Topic- Section 3	Partner-inclusiveness- Section 3	Specificity- Section 3	Discussion Topic- Section 4	Partner-inclusiveness- Section 4	Specificity- Section 4
Feels incompetent sometimes with parents	1	1	Talks about how much those feeling at home and school influence each other	1	1
More detail on feeling anxiety in social interactions	1	1	Examples of stress when in social situations	1	1

Note: Coding sheets were completed with excel files. For participants that were double coded, there were 8 partner-inclusiveness codes that were averaged and 8 specificity codes that were averaged.

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