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I Love You (But I Can't Look You in the Eyes): Explicit and Implicit Self-Esteem Predict Verbal and Nonverbal Response to Relationship Threat

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LOYOLA UNIVERSITY CHICAGO

“I LOVE YOU” (BUT I CAN’T LOOK YOU IN THE EYES):
EXPLICIT AND IMPLICIT SELF-ESTEEM PREDICT VERBAL AND
NONVERBAL RESPONSE TO RELATIONSHIP THREAT

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

PROGRAM IN SOCIAL PSYCHOLOGY

BY

JULIE LONGUA PETERSON

CHICAGO, IL

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To Sam

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ABSTRACT

Research has revealed the value of studying communication patterns, both verbal and nonverbal, in couple conflict discussions (Gottman & Levenson, 2000; Noller, Feeney, Bonnell, & Callan, 1994). In fact, the study of behavioral reactions to relationship conflict has been central to predicting important relationship outcomes, such as relationship satisfaction and breakup (e.g. see Gottman, 1998 for a review). The goal of the current dissertation was to explore how explicit (i.e., conscious, deliberate) and implicit (i.e., unconscious, automatic) self-esteem correspond to people's self-reported approach and avoidance verbal and nonverbal behaviors following a relationship threat manipulation (Study 1) and people's observer-rated approach and avoidance verbal and nonverbal behaviors in an actual conflict discussion (Study 2). Results revealed the importance of both explicit and implicit self-esteem for predicting responses to relationship threat, revealing a pattern of results consistent with the risk regulation model (Murray et al., 2006; 2008). These studies also revealed the value of understanding how perceptions of a partner's commitment moderate the relation between implicit self-esteem and risk regulation dynamics. The results of the current research provide some of the first evidence that implicit self-esteem influences romantic relationship regulation dynamics during relationship conflict.

CHAPTER ONE

INTRODUCTION

Romantic relationships are perhaps one of the most crucial kinds of relationships for satisfying the need to belong and feel accepted, which is a fundamental human motivation (Baumeister & Leary, 1995). These intimate relationships not only satisfy belongingness needs, but are important for both mental and physical health (see Burman & Margolin, 1992 for a review). As such, the dissolution of romantic relationships, particularly through separation or divorce, is associated with a whole host of negative health outcomes, including depressed immune system functioning and increased frequency of illness, alcohol abuse, and mortality (see Bloom, Asher, & White, 1973 and Burman & Margolin, 1992 for reviews). The negative consequences of relationship loss have prompted researchers to explore causes of relationship dissatisfaction and dissolution. Such research has revealed the importance of studying communication patterns, both verbal and nonverbal, in couple interactions, and, more specifically, conflict discussions (Gottman, Coan, Carrere, & Swanson, 1998; Gottman & Levenson, 2000; Noller, Feeney, Bonnell, & Callan, 1994; Levenson & Gottman, 1983).

The present research will explore the role of the self in approach and avoidance verbal and nonverbal reactions to relationship conflict. According to the risk regulation model, dispositional differences in felt security (i.e. self-esteem) influence how people respond to relationship threat (Murray, Derrick, Leder, & Holmes, 2008; Murray, Holmes,

& Collins, 2006). In order to assuage feelings of rejection in romantic relationships, people need to increase dependence on their partner and sacrifice needs for self-protection. Unfortunately this tradeoff is not easily negotiated by people who find it difficult to attain a felt security in their romantic relationships (e.g., people low in explicit self-esteem) (Murray et al., 2008; Murray et al., 2006). As a result, differences in explicit self-esteem will likely influence the kinds of approach and avoidance verbal and nonverbal behaviors that people engage in during conflict discussions. Importantly, this regulation process can also happen at an implicit (unconscious) level (DeHart, Pelham, & Murray, 2004), suggesting that implicit self-esteem may also influence behaviors during relationship threat (DeHart, Tennen, Armeli, Todd, & Mohr, 2009). The current research aims to expand on past research by exploring how explicit (i.e., conscious, deliberate) and implicit (i.e., unconscious, automatic) self-esteem correspond to people's approach and avoidance verbal and nonverbal behaviors under relationship threat.

CHAPTER TWO

BEHAVIORAL RESPONSES TO RELATIONSHIP CONFLICT

The study of behavioral reactions to relationship conflict has become central to predicting both happiness and stability in romantic relationships. Most notably, Gottman and his colleagues have been able to predict both relationship satisfaction and divorce with astounding accuracy using observations from couple discussions of conflict (e.g. Gottman et al., 1998; Gottman & Levenson, 2000; Levenson & Gottman, 1983; see also Gottman, 1998 for a review). For example, Gottman and Levenson found that behaviors during a single conflict discussion predicted both early and later divorcing over a 14-year period. Specifically, increased negative affect during conflict discussion predicted divorce early in the marriage, where as a lack of positive affect predicted divorce later in the marriage (Gottman & Levenson, 2000). Moreover, couples most destined for relationship loss seem to be those who, during conflict, criticize and express contempt for each other, respond defensively, and withdraw from one another (Gottman, 1994). Other research has reported that styles of conflict engagement predict later relationship dissatisfaction, with withdrawal behaviors having a particularly negative impact on relationship functioning (Noller, Feeney, Bonnel, & Callen, 1994). On the other hand, the use of positive affect (e.g. affection, interest, humor) during relationship conflict is associated with both marital happiness and marital stability (Gottman et al., 1998). In short, research indicates that behavioral responses to relationship conflict predict

important relationship outcomes, reinforcing the importance of studying conflict behaviors.

Approach and Avoidance Behaviors

Researchers have proposed two distinct motivational systems that regulate behavior: an appetitive (approach) system and an aversive (avoidance) system (e.g. Gray, 1987; Carver & White, 1994). The appetitive system, referred to as the behavioral approach system (BAS), is sensitive to reward cues and, in response to such cues, motivates behavior that is focused on obtaining a desired outcome. On the other hand, the aversive system, referred to as the behavioral inhibition system (BIS), is sensitive to signals of punishment and inhibits behavior that may elicit negative outcomes (Gray, 1987; Carver & White, 1994). In a daily diary study Gable, Reis, and Elliot (2000) reported that people with higher (vs. lower) BAS sensitivity experience greater daily positive affect, whereas people with higher (vs. lower) BIS sensitivity experience greater daily negative affect. This research supports the notion that the approach and avoidance systems are relatively independent and operate through separate processes (Gable et al., 2000). Moreover, the independence of these systems indicates that people can have both strong approach and strong avoidant motivations (e.g. Gray, 1987; Gable et al., 2000)

The approach-avoidance framework has also been applied to interpersonal relationships. Gable (2006) has conceptualized distinct approach and avoidance social goals that motivate behavior within the context of social relationships. Approach social goals orient people toward positive social outcomes, such as intimacy and understanding in a relationship. Conversely, aversive social goals orient people away from negative

social outcomes, such as conflict or rejection within a relationship (Gable, 2006; Elliot, Gable, & Maples, 2006). Research has revealed that approaching positive or rewarding social outcomes is associated with less loneliness, more positive attitudes toward social relationships, and more satisfaction within social relationships. On the other hand, the avoidance of negative social outcomes is associated with more loneliness, relationship anxiety, and negative attitudes toward social relationships (Gable, 2006). These findings seem to suggest that approach behaviors are related to positive social outcomes, whereas avoidant behaviors are related to negative social outcomes.

It seems reasonable to assume that within the context of romantic relationship conflict, both approach behaviors and avoidant behaviors can take on a positive or negative valence. In line with this view, research indicates there are a variety of both positive and negative approach behaviors that are related to relationship outcomes (e.g. Gottman, 1998; Gottman & Driver, 2005; Gottman & Levenson, 2000). For example, positive approach behaviors during relationship conflict, such as expressing affection or empathy (Gottman, 1998; Gottman & Driver, 2005), are associated with stable, happy romantic relationships, whereas negative approach behaviors, such as complaining, criticizing (Gottman, 1998; Gottman & Levenson, 2000) and putting the partner down (Gottman & Levenson, 2000), are associated with dysfunctional romantic relationships. Therefore, though both positive and negative approach behaviors direct behavior toward the partner during conflict, they are not strictly associated with the attainment of social rewards (e.g. Gable, 2006), particularly in the case of negative approach behaviors, which likely reduce intimacy with the partner, while escalating conflict.

Importantly, the expression of positive and negative avoidant behaviors during relationship conflict are also linked to different relationship outcomes. Negative avoidant behaviors, such as withdrawal from the partner during relationship conflict, have been shown to be detrimental to relationship well-being (e.g. Noller et al., 1994; Gottman, 1998). On the other hand, the expression of positive aversive behaviors, such as walking away from one's partner to cool off or the use of humor, has been linked to positive relationship outcomes. For example, research has indicated that humor can be used (particularly by the wife) to de-escalate conflict (Gottman et al., 1998). In addition, both husband and wife's humor during conflict is predictive of more stable marriages (Gottman & Levenson, 1998). Positive avoidant behavior can also be seen when partners avoid engaging in negative behaviors, such as refraining from criticizing or complaining (e.g. Murray, Bellavia, Rose, & Griffin, 2003). In a review of marital processes, Gottman (1998) suggests that refraining from, or editing, negative responses results in more successful conflict interactions. Therefore, although both positive and negative aversive behaviors are aimed at avoiding conflict (e.g. Gable, 2006), positive aversive behaviors are aimed at de-escalating conflict rather than alienating the partner.

Verbal Behaviors

Approach and avoidance behaviors during relationship conflict have important implications for relationship functioning. Of interest in the current study is the channel (either verbal or nonverbal) through which these conflict behaviors are expressed. Verbal behavior (e.g. criticizing, humor, problem descriptions) during interpersonal interactions is integral to conveying information about thoughts, feelings, and needs. In fact, verbal

behaviors during relationship conflict can predict marital satisfaction (Noller et al., 1994; Levenson & Gottman, 1983) and happiness (Gottman et al., 1998), as well as divorce (Gottman et al., 1998; Gottman & Levenson, 2000).

Other research exploring verbal behavior during conflict has revealed similar associations between verbal communication and relationship functioning. In a lab study, Daigen and Holmes (2000) explored the effects of verbal interruptions during a conflict on current mood and overall marital satisfaction. These researchers reported that couples who engaged in more disagreement interruptions (i.e. “speech that demonstrates rejection, disagreement, challenge, or contradiction of the first speaker’s communication”) during a conflict discussion not only felt worse during the actual interaction, but also reported lower marital satisfaction (Daigen & Holmes, 2000). Relatedly, Canary, Weger, and Stafford (1991) reported that relationship satisfaction was negatively related to argument sequences where couples disagreed with one another. In other words, couples lower in relationship satisfaction were more likely to respond to a partner’s communication by disagreeing.

Research in the communication literature has revealed that verbal complaints about a partner’s personal characteristics are particularly likely to result in escalated conflict episodes (Alberts & Driscoll, 1992). Importantly, such escalations in verbal exchanges during conflict have been linked to health outcomes. For example, Ewart, Taylor, Kraemer and Agras (1991) audio taped couple’s conflict discussions while simultaneously assessing fluctuations in blood pressure. This research revealed that increasing hostility in conflict communications was associated with an increase in blood

pressure for women, while increased speech rate was associated with an increase in blood pressure for men. Taken together, the research on verbal behaviors during relationship conflict seems to suggest that verbal communication during conflict interactions has implications for relationship functioning as well as personal well-being.

Nonverbal Behaviors

Research has provided evidence that nonverbal behaviors (e.g., body language, facial expressions, vocal tone) carry their own importance in relationship interactions (e.g. Gonzaga, Keltner, Lohdahl, & Smith, 2001; Gonzaga, Turner, Keltner, Campos, & Altemus, 2006; Noller, 1982; Schachner, Shaver, & Mikulincer, 2005). The ability to express (encode) nonverbal behaviors is central to successful communication within interpersonal relationships and, in particular, romantic relationships. In fact, Gonzaga and colleagues (2006) have found that certain nonverbal behaviors during relationship interactions, such as Duchene smiles, head nods, and forward leans, are unique to the experience of romantic love (see also Gonzaga et al., 2001). Moreover, nonverbal behavior can convey a great deal of information in a small amount of time. In a meta-analysis on the predictive accuracy of behavioral observations, Ambady and Rosenthal (1992) reported that judges coding nonverbal behavior (e.g., body movement, facial expressions, tone of voice) predicted outcomes from short observations (under 30 seconds) with the same accuracy as they predicted outcomes from longer observations (up to 5 minutes). This study revealed that people can make accurate predictions about another's disposition or interpersonal expectancies (e.g., teachers' expectations of students) from briefly observing nonverbal expressions (Ambady & Rosenthal, 1992),

suggesting that nonverbal behaviors during relationship conflict may be laden with information about a partner's feelings and relational expectations.

Attachment theory suggests that nonverbal communication of emotion is essential for eliciting caregiving responses from attachment figures (Bowlby, 1982). In a review of nonverbal behavior in attachment relationships (e.g., romantic relationships), Schachner and colleagues (2005) indicate that, in response to threat, the successful expression of nonverbal behavior is important for communicating needs for support and receiving that support from romantic partners (Schachner et al., 2005). Moreover, research indicates that nonverbal displays of support seeking behavior are motivated by stressful events (Collins & Feeney, 2000). Specifically, Collins and Feeney videotaped couples in the lab as one partner disclosed a personal problem to the other partner. These researchers reported that when participants appraised their personal problem as more stressful, they displayed more direct nonverbal support-seeking behaviors (e.g., nonverbal expressions of distress such as crying or pouting). Importantly, such direct expressions of need were positively related to actually receiving responsive support from the partner (Collins & Feeney, 2000).

Approach and Avoidance Verbal and Nonverbal Behaviors

Because conflict discussions necessarily involve both verbal and nonverbal communication, (e.g., Gottman & Levenson, 2000; Noller, Feeney, Bonnell, & Callan, 1994) the current study will explore positive and negative approach and avoidance behaviors as they are expressed through either the verbal or nonverbal channel during relationship conflict. In the verbal channel, I suggest that *negative approach verbal*

behaviors are aimed at reducing intimacy by moving toward the partner with negativity, and include verbally criticizing the partner or putting the partner down. I further suggest that *negative avoidant verbal behaviors* are those that avoid conflict by alienating the partner. Negative avoidant verbal behaviors include active attempts to change the subject so as to avoid addressing the issue or verbally refusing to listen to the partner. Previous research on relationship conflict indicates that such negative approach and avoidance verbal behaviors will have relatively negative effects on relationship well-being (e.g. Gottman, 1998; Gottman & Driver, 2005; Gottman & Levenson, 2000; Heyman & Vivian, 2000). Conversely, *positive approach verbal behaviors* increase closeness with the partner and constructively approach the conflict. Positive approach verbal behaviors include verbal reassurances of love or positive problem descriptions. Such expressions of positive affect signal acceptance during conflict (Heyman & Vivian, 2000) and have been shown, in part, to characterize stable marriages (Gottman & Levenson, 2000). In addition, I propose that *positive avoidant verbal behaviors* are those that reduce conflict without completely isolating the partner. Positive avoidant verbal behaviors include the use of humor or drawing attention to other positive aspects of the relationship. Table 1 provides additional examples of positive and negative approach and avoidance verbal behaviors.

Verbal Channel		
Behavior Valence	Approach Behaviors	Avoidance Behaviors
Positive	Verbal expressions of love, Positive problem description	Humor, drawing attention to other positive aspects of the relationship
Negative	Criticizing or insulting partner, responding sarcastically	Refusing to listen to partner, verbally refusing to discuss the conflict any longer

Table 1. Approach and Avoidance Verbal Behaviors.

In the nonverbal channel, I suggest that negative approach behaviors are aimed at reducing intimacy by expressing negativity toward the partner. *Negative approach nonverbal behaviors* include scowling at a partner, using an angry tone, or rolling one's eyes. These behaviors express hostility or displeasure through the nonverbal channel (Heyman & Vivian, 2000). In addition, I propose that *negative avoidant nonverbal behaviors* signal withdrawal and a reduction in closeness. These behaviors include avoiding eye-contact or displaying closed off body movements and can be a sign of negative relationship functioning (see Gottman, 1998 for a review). On the other hand, I suggest that *positive approach nonverbal behaviors* include maintaining eye-contact, smiling or moving toward the partner during the interaction. Research on the nonverbal correlates of love has revealed that such approach nonverbal behaviors predict relationship satisfaction and commitment (Gonzaga et al., 2001), suggesting these behaviors may be helpful for regulating romantic conflict. Finally, I propose that *positive avoidant nonverbal behaviors* include refraining from engaging in negative

behaviors. As previously noted, the ability to refrain from responding with negative affect is characteristic of happier couples (Gottman, 1998; Notarius, Benson, Sloane, & Vanzetti, 1989), indicating that this type of avoidant behavior may be received positively during relationship conflict. Table 2 provides additional examples of positive and negative approach and avoidance nonverbal behaviors.

Nonverbal Channel		
Behavior Valence	Approach Behaviors	Avoidance Behaviors
Positive	Maintaining eye contact, leaning toward partner, smiling	Refraining from negative behaviors, controlling negative body movements
Negative	Rolling eyes, using an angry tone, frowning	Reducing eye contact, folding arms or reducing closeness

Table 2. Approach and Avoidance Nonverbal Behaviors

Channel Inconsistency

The research on conflict interactions seems to suggest that the approach and avoidance verbal and nonverbal behaviors during conflict are important for determining satisfying and lasting relationships (e.g. Gottman et al., 1998; Gottman & Levenson, 2000; Noller et al., 1994; Vincent, Friedman, Nugent & Messerly, 1979). However, verbal and nonverbal channels may not always complement each other, and conflict between these two channels may be a sign of difficulty in the relationship. Specifically, Noller (1982) videotaped couples in the lab while they discussed issues in their marriage. This research revealed that discrepancies between the valence of verbal and nonverbal

behaviors are associated with poor marital adjustment (Noller, 1982). Why might there be disagreement between verbal and nonverbal channels?

Research by Vincent and colleagues (1979) suggests that during relationship conflict verbal behaviors may be more susceptible to conscious control and correction than nonverbal behaviors. These researchers reported that when couples were asked to fake their behavior during a conflict-eliciting task, only verbal behaviors were successfully altered. In fact, both distressed and non-distressed couples were unable to fake nonverbal behaviors, implying that, though verbal behaviors can be consciously adjusted, non-verbal behaviors remain out of conscious awareness and immune to purposeful alteration (Vincent, Friedman, Nugent, & Messerly, 1979). In line with this view, nonverbal behavior is often thought to automatically express emotional states without conscious awareness, making it highly difficult to regulate nonverbal behavior for self-presentational purposes (DePaulo, 1992).

Though nonverbal behavior is difficult to control, it likely conveys important information about a romantic partner's feelings and relationship expectancies (e.g., Ambady & Rosenthal, 1992). It seems possible that nonverbal behavior is influenced by processes that operate unconsciously and communicates information not readily apparent in the verbal channel. As such, it is important to study not only approach and avoidance verbal and nonverbal conflict behaviors, but also the conscious and unconscious processes elicited by relationship conflicts (and the interpersonal risk inherent to them) that influence these different behavioral reactions.

CHAPTER THREE

EXPLICIT AND IMPLICIT SELF-ESTEEM

The Social Origins of Self-esteem

Over the last decade, it has become increasingly clear that people hold explicit (conscious, relatively controlled) and implicit (unconscious, overlearned, and relatively uncontrolled) self-evaluations (see Greenwald & Banaji, 1995, for a review). Presumably, both explicit and implicit self-esteem have social origins, developing based on how people are regarded by significant others (Cooley, 1902; Mead, 1932). The sociometer hypothesis suggests that self-esteem indicates levels of interpersonal acceptance (Leary, Tambor, Terdal, & Downs, 1995). According to the sociometer theory, while people high in explicit self-esteem have experienced many subjectively positive relationships, people low in explicit self-esteem have repeatedly perceived more interpersonal rejection. Due to repeated experiences of exclusion, people low (vs. high) in explicit self-esteem have sociometers that are calibrated to more readily perceive interpersonal rejection (Leary et al., 1995). Importantly, differences in the recurring quality and success of people's interpersonal relationships are also reflected in people's levels of implicit self-esteem (e.g., DeHart, Pelham, & Tennen, 2006). Daily diary research suggests that implicit self-esteem functions as an implicit sociometer, motivating people low in implicit self-esteem to seek out social reconnection in response to negative interpersonal interactions (DeHart, Tennen et al., 2009).

Consistent with the social nature of self-esteem, attachment theory contends that through repeated interactions with significant others, children form mental representations of the self, and the self in relation to others (Bowlby, 1988). Thus, the quality and consistency of early experiences with primary caregivers results in internal working models, which contain conscious and unconscious beliefs about the self's worthiness (or unworthiness) of love (Bowlby, 1973, 1988; see Hazan & Shaver, 1994 and Mikulincer & Shaver, 2003 for reviews). Though both implicit and explicit self-esteem have origins in parent-child relationships, implicit beliefs about the self are thought to develop earlier than explicit beliefs, forming even before the acquisition of language (Bowlby, 1988; DeHart, et al., 2006; Koole, Dijksterhuis, & van Knippenberg, 2001). Owing to the importance of the implicit self, much of what is learned about the self may be acquired implicitly, through interactions with significant others during infancy and early childhood (see Koole & DeHart, 2005 for a review).

In a similar vein, DeHart and colleagues (2006) investigated the relation between parenting style and self-esteem. Results revealed that distinct aspects of early interactions with parents were differentially related to participants' conscious and unconscious self-evaluations. Specifically, maternal nurturance was positively and uniquely related to children's reports of explicit and implicit self-esteem. On the other hand, reports of maternal overprotectiveness were negatively related only to children's reports of implicit self-esteem. Such findings suggest that implicit self-esteem may harbor the negative effects of parenting style well after explicit self-esteem has been self-protectively corrected (DeHart et al., 2006).

Furthermore, research on the relation between implicit and explicit self-esteem consistently indicates that the two are uncorrelated (e.g. Bosson, Swann, & Pennebaker, 2000; Greenwald & Farnham, 2000, Hetts, Sakuma, & Pelham, 1999). The dissociation between implicit and explicit self-esteem may be the result of the unconscious and automatic nature of implicit self-evaluations. Repeated experiences in infancy and early childhood cause overlearned associations with the self to become automatic (Epstein, 1994; Fazio, Sanbonmatsu, Powell, Kardes, 1986). As such, implicit beliefs about the self are not subject to conscious repair (Hetts & Pelham, 2001). Explicit beliefs, on the other hand, can be reinterpreted and consciously corrected (Hetts & Pelham, 2001). Therefore, while changes in the quality of interpersonal relationships may be exhibited by the explicit self, previously internalized beliefs about the implicit self will likely remain intact and automatically elicited (e.g., DeHart et al., 2006).

Behavioral Correlates of Self-esteem

Because of the nature of implicit and explicit belief systems, these beliefs should have independent effects on behavior, with explicit self-esteem predicting more deliberative responses and implicit self-esteem affecting more automatic, emotional responses (Hetts & Pelham, 2001). Therefore, explicit self-esteem is likely to influence verbal behaviors precisely because these behaviors can be consciously controlled. Conversely, implicit self-esteem is likely to influence nonverbal behaviors because these behaviors are more difficult to consciously regulate (Pelham & Hetts, 1999). Research supports the notion that explicit and implicit self-esteem influence different behavioral channels. Specifically, Spalding and Hardin (1999) had participants engage in either a

self-relevant or self-irrelevant interview on emotional health. Participants then rated their own levels of anxiety and interviewers rated participants' nonverbal anxiety. Spalding and Hardin (1999) reported that, in the self-relevant condition, participants' self-reported anxiety was related to their explicit self-esteem, while observer rated nonverbal anxiety was related to participants' implicit self-esteem. It seems reasonable to assume that the influence of explicit and implicit self-esteem on different behavioral channels during self-relevant interviews (which represent a threat to the self) will extend to threatening relationship interactions.

Though implicit and explicit self-esteem predict distinct outcomes, there are instances where the two belief systems interact to predict behavior. Several researchers have suggested that people may, at times, directly experience their implicit self-esteem (Jordan, Spencer, Zanna, Browne & Correll, 2003). If explicit and implicit self-esteem are congruent, then experiences of implicit self-esteem should not be of any major consequence. However, when explicit and implicit self-esteem are incongruent, as is the case when explicit self-esteem is high, but implicit self-esteem is low, experiences of implicit self-esteem may elicit negative affect and doubts about self-worth (Jordan et al., 2003; Spencer, Jordan, Logel & Zanna, 2005). Such doubts are particularly likely to be activated under conditions of ego-threat (Koole & DeHart, 2005; Lambird & Mann, 2006; Zeigler-Hill, 2006), motivating individuals with high explicit and low implicit self-esteem (i.e. insecure high self-esteem) to engage in compensatory behaviors.

Consistent with this idea, research has indicated that individuals with insecure high self-esteem engage in more defensive behaviors, such as in-group bias (Jordan,

Spencer, Zanna, Hoshino-Browne, & Correll, 2003), out-group derogation (Kernis, Abend, Goldman, Shrira, Paradise, & Hampton, 2005), self-enhancement (Bosson, Brown, Zeigler-Hill, & Swann, 2003), and discrimination (Jordan, Spencer & Zanna, 2005). Kernis, Lakey, and Heppner (2008) reported that during stressful interviews about life experiences, participants with insecure high self-esteem exhibited more defensive behaviors while describing stressful events (e.g., distorting the event, blaming others). Research by Lambird and Mann (2006) has revealed that after receiving failure feedback on a creativity task, participants with insecure high self-esteem performed worse on a self-regulatory task, suggesting that people with insecure high self-esteem are more likely to experience self-regulation failure in response to ego-threat.

Moreover, insecure high self-esteem has been linked to self-esteem instability (see Zeigler-Hill, 2006). Research on the consequences of unstable high self-esteem (a correlate of insecure high self-esteem) suggests that people with this type of self-esteem are more reactive to negative events (Greeneir et al., 1999) and a partner's negative behavior (see Kernis, 2005 for a review). For example, in a laboratory study, participants were asked to read scenarios of their partner engaging in ambiguously negative behaviors, such as not looking up from what they are doing when the participant walks in the room. Participants with unstable high self-esteem reported that they would react to such scenarios by either getting-even or doubting their partner's acceptance (Kernis, Goldman, & Paradise, 2004). In short, though it is important to study the independent effects of implicit and explicit self esteem, research on insecure high self-esteem and its correlates suggests it may be equally fruitful to explore the interaction between implicit

and explicit self-esteem predicting behaviors during other threatening events, such as relationship conflict.

CHAPTER FOUR

THE SELF AND ROMANTIC RELATIONSHIPS

Research suggests that it is those people who love and value themselves who often have the most fulfilling and satisfying romantic relationships (Hazan & Shaver, 1987; 1994, Murray, Holmes, & Griffin, 1996a). In fact, laboratory research by Hazan & Shaver (1987) has revealed that people high in attachment security (i.e. high self-esteem) are more likely to describe love experiences as happy, friendly and trusting, and report continued acceptance of their partner in spite of a partner's flaws. Other research has shown that secures report higher relationship satisfaction (Brennan & Shaver, 1995), intimacy, and enjoyment in their relationships, and more positive attitudes toward their partner's family and friends (Feeney & Noller, 1991). Moreover, people high in self-esteem see their partners more positively than their low self-esteem counterparts (Murray et al., 2000, Murray et al, 2001) and report not only valuing their partner more, but also more optimism about the future of their relationships (Murray et al., 2001). Such research suggests that beliefs about the self have important consequences for both beliefs about the partner and overall relationship functioning.

Beliefs about Self and Others: Attaining Security in Romantic Relationships

According to attachment theory, beliefs about the self that develop in early childhood form the basis for expectations about later adult relationships (Bowlby, 1973, 1988; Collins & Read, 1994). Previous research indicates securely attached people not

only have a more positive mental representation of themselves compared to their insecure counterparts, but these positive self-evaluations are reflected in secure peoples' beliefs that important others (e.g., romantic partners) also see them as positive (Mikulincer, 1995). Similarly, the dependency regulation model suggests that people rely on their own self-evaluations as a template for perceptions about how their romantic partner views them (DeHart, Murray, Pelham, & Rose, 2003; Griffin & Rose, 1991; Murray et al., 2000). For example, Murray and colleagues (2000) asked married and dating samples to report how they saw their partners and how they thought their partners saw them on a set of interpersonal attributes. While people high in self-esteem accurately believed their partners regarded them in a positive light, people low in self-esteem grossly underestimated their partners' positive regard.

Over time doubts about a partner's positive regard get incorporated into working models of self and can eventually weaken already frail beliefs about both the self and the relationship. Therefore, reflected appraisals of a partners' regard are an important mediator between self-esteem and romantic relationship functioning. In fact, people who feel more positively regarded by their partners report greater trust and less conflict in their romantic relationships (Murray et al., 2000). Though this research has focused specifically on explicit beliefs about self and others, there is evidence that people's beliefs about romantic partners can become automatic (Bowlby, 1982; DeHart, et al., 2004; Mikulincer, Gillath & Shaver, 2002) and are likely influenced by implicit beliefs about the self (DeHart, Pelham, Fiedorowicz, Carvallo, & Gabriel, *in press*). Research suggests that working models (which contain unconscious beliefs about the self; Bowlby,

1982) can be automatically activated under certain contexts, such as threat or rejection. For example, in several laboratory studies Mikulincer, Gillath, and Shaver (2002) demonstrated that when participants were primed with a threatening word (e.g., *failure*) they more quickly identified names of attachment figures (e.g., romantic partners), suggesting that threatening contexts automatically activated cognitive representations of people who should provide security during times of need.

More recent research provides evidence that people's implicit beliefs about the self impact their implicit beliefs about significant others (DeHart, Pelham et al., *in press*). Specifically, DeHart and colleagues assessed peoples' implicit self-esteem and implicit evaluation of close others, including romantic partners. These researchers reported that, across five studies, implicit self-esteem was consistently related to implicit evaluations of close others, whereas explicit self-esteem was consistently unrelated to these evaluations. Moreover, the relationship between people's implicit self-esteem and implicit evaluations of close others was greater when the relationship was normatively closer, indicating that participants' implicit evaluations of their romantic partners were more closely tied to their implicit self-esteem than were their implicit evaluations of a sibling or a friend. Consistent with the idea that people's explicit evaluations of romantic partners are largely a projection of feelings about the self, these findings suggest that people also project their implicit evaluations of the self onto their implicit evaluations of their romantic partners (DeHart, Pelham et al., *in press*).

Conscious and unconscious beliefs about the self's worthiness of love and acceptance impact people's perceptions of romantic partners and their ability to feel

secure in romantic relationships. Specifically, people with high explicit self-esteem believe they possess qualities worth loving and valuing and assume that their partners see in them these same valuable qualities (Hazan & Shaver, 1987; Mikulincer, 1995; Murray, Holmes, & Griffin, 2000). People with high explicit self-esteem, therefore, find it relatively easy to attain a felt security in their romantic relationships. In contrast, people who feel more uncertain about their worthiness of love (i.e. low explicit self-esteem) are less likely to feel that they possess valuable qualities (Hazan & Shaver, 1987; Mikulincer, 1995; Murray et al., 1998) and to believe that their partner sees qualities in them worth loving (Mikulincer, 1995; Murray et al., 2000).

Though people with low explicit self-esteem have partners who love them just as much as the partners of people with high explicit self-esteem (Murray et al., 2001), doubts about a partners regard make it difficult for people low in explicit self-esteem to find security in their partners' continued love and acceptance. Because research has begun to suggest that people's implicit beliefs about the self influence their implicit beliefs about romantic partners (e.g. DeHart et al., 2004; DeHart, Pelham et al., *in press*), it seems likely that implicit doubts about the self will also negatively bias unconscious, automatic feelings of relationship security. Importantly, the effects of people's insecurities may be most apparent during risky circumstances. For example, attachment theory contends that working models of self and other are most likely to be activated under conditions of threat (Bowlby, 1982; Mikulincer, Gillath, & Shaver, 2002), suggesting the effects of both explicit and implicit self-esteem on relationship functioning may be most evident in a threatening situation, such as romantic relationship conflict.

Explicit Self-esteem and Rejection in Romantic Relationships

Research suggests that explicit self-esteem greatly influences responses to interpersonal rejection within a romantic relationship. According to the sociometer theory, self-esteem works as an interpersonal monitoring system, in which people's previous interpersonal experiences dictate the calibration of the system to more (or less) readily perceive interpersonal rejection (Leary et al., 1995). Laboratory research has shown that people low in explicit self-esteem perceive more interpersonal rejection compared to those high in explicit self-esteem (Leary et al., 1995). As a result, people low in explicit self-esteem approach their romantic relationships in a hypothesis testing fashion, being highly sensitive to signs of a partner's potential rejection (e.g. Murray, Bellavia, Rose, & Griffin., 2003; Murray, Griffin, Rose, & Bellavia, 2003). For example, daily diary research has found that people who feel chronically less valued by their romantic partner (i.e. low explicit self-esteem) interpret a partner's bad mood as a reflection of their waning acceptance. Specifically, on days romantic partners reported more negative moods than usual, people who felt chronically less valued responded by perceiving more rejection from the partner the next day (Murray, Bellavia et al., 2003).

In order to maintain the kind of satisfying relationship that meets belongingness needs (Baumeister & Leary, 1995), individuals must behave in ways that foster closeness between themselves and their partner. By increasing closeness to their relationship partner, however, individuals increase the risks associated with rejection. The risk regulation model proposes that interpersonal risk, stemming even from within a romantic relationship, activates two competing goals: the goal of seeking closeness with others

(e.g., romantic partners) who are likely to meet needs for connectedness, and the goal of protecting the self from further rejection and pain (Murray et al., 2008; Murray et al., 2006). Previous research has demonstrated that although perceived risk automatically activates connectedness goals in everyone, some people also activate an executive control system that prioritizes self-protection and inhibits connectedness goals (Murray et al., 2008). Whether an individual's risk regulation system prioritizes connectedness goals versus self-protection goals depends, in part, on an individual's ability to feel secure in their romantic partner's love and acceptance (Murray et al., 2008; Murray et al., 2006).

Because people high in explicit self-esteem not only have sociometers that are less sensitive to cues of rejection, but also find it relatively easy to attain a felt security in their romantic relationships, their risk regulation systems tend to prioritize connectedness goals. Therefore, in response to interpersonal rejection, people high in explicit self-esteem are able to pursue their desire for connection by increasing closeness with their romantic partner (DeHart, Longua, Gnedko, & O'Connor, 2009; Murray et al., 2008; Murray et al., 2006; Murray, Rose, Bellavia, Holmes & Kusche, 2002). Consistent with the risk regulation model, daily diary research has revealed that perceptions of rejection from both outside and within romantic relationships motivate people higher in security to seek their romantic partner for sexual intimacy. Specifically, on days people higher in security (i.e. self-esteem) experience more interpersonal rejection, they are significantly more likely to have sexual intercourse with their romantic partner that evening. These results suggest that people high in security actively increase intimacy with their romantic

partner after feeling rejected as a way to fulfill needs for connection (DeHart, Longua et al., 2009).

Other research has revealed that people with high explicit self-esteem react to threats of rejection within their romantic relationship by exaggerating their positive regard for their partner and reporting greater confidence in their partner's acceptance (Murray et al., 2002). Specifically, in a laboratory study, Murray and colleagues (2002) led participants to believe that their partner had an unspoken complaint about them. People high in explicit self-esteem responded to this threat by reporting greater confidence in their partners' acceptance, more favorable evaluations of their partner, and drawing closer to their partner. Moreover, daily diary research has revealed that people with high explicit self-esteem respond to previous day's rejection by refraining from behaving negatively toward their partner the next day, suggesting that people high in explicit self-esteem also pursue connectedness needs by controlling negative reactions (Murray et al., 2003).

Conversely, people low in explicit self-esteem have chronic concerns about rejection and find it more difficult to attain a felt security in their romantic relationships. Therefore, they have risk regulation systems that are calibrated to prioritize self-protection goals. In response to interpersonal rejection, people low in explicit self-esteem pursue self-protection goals by reducing closeness with their partner (Murray et al., 2008; Murray et al., 2006; Murray et al., 2002). Unlike people with high explicit self-esteem, people with low explicit self-esteem actively decrease intimacy with their romantic partner after feeling rejected (presumably as a way to self-protect against further

rejection). Specifically, on days people low in security (i.e. low in self-esteem) perceive more interpersonal rejection, they are significantly less likely to have sex with their partner that evening (DeHart, Longua et al., 2009). Moreover, observational research indicates that people low in attachment security display more negative behaviors during a conflict discussion with their partners (Simpson, Rholes, & Philips, 1996). Simpson et al. reported that, after discussing a major relationship problem, insecure participants not only displayed more anxiety and stress, but also less warmth toward their partner. In addition, insecure participants reported seeing their partners and relationship less positively after the conflict discussion.

Other research has revealed that people with low explicit self-esteem react to threats of rejection within their romantic relationship by derogating their partner, reporting less confidence in their partner's acceptance (Murray et al., 2002), and responding to previous day's rejection by behaving more negatively toward their partner the next day (Murray, Bellavia et al., 2003). For example, daily diary research has revealed that on days after people who chronically feel less valued (i.e. low explicit self-esteem) perceive rejection, they engage in significantly more negative behaviors toward their partner (Murray, Bellavia et al., 2003). Moreover, cross-sectional research has revealed that, in response to a partner's hypothetical transgression (e.g. "imagine your partner didn't respond when you tried to cuddle") people high in attachment related anxiety are more likely to report intentions to engage in negative or hostile behaviors toward the partner (Collins, Ford, Guichard, & Allard, 2006). Thus, unlike people with high explicit self-esteem, chronic relationship insecurities inhibit people low in explicit

self-esteem from responding to relationship difficulties by affirming the relationship (Murray et al., 2002, Murray et al., 1998).

Because explicit self-esteem corresponds to more deliberative responses, such as verbal behaviors (e.g. Hetts & Pelham, 2001; Pelham & Hetts, 1999; Spalding & Hardin, 1999), it seems reasonable to assume that risk regulation dynamics will be apparent in verbal responses during conflict with romantic partners. To pursue connectedness goals during relationship conflict, people high in explicit self-esteem should display verbal behaviors that are more positive than those of people with low explicit self-esteem. Moreover, previous research has revealed that people who chronically feel more secure respond to feelings of rejection by both drawing closer to their partner (e.g., DeHart, Longua et al., 2009) and refraining from negative behaviors (Murray, Bellavia et al., 2003). Such research suggests that people high in explicit self-esteem will engage in both more positive approach and more positive avoidance verbal behaviors during relationship conflict. On the other hand, to self-protectively distance themselves from relationship partners, people low (vs. high) in explicit self-esteem should display more negative verbal behaviors. Because research suggests that people low in explicit self-esteem respond to rejection by both derogating (Murray, Bellavia et al., 2003) and reducing closeness with romantic partners (Murray et al., 2002), people low in explicit self-esteem are likely to engage in both more negative approach and negative avoidance verbal behaviors during relationship conflict.

Implicit Self-esteem and Rejection in Romantic Relationships

Much of the research exploring how the self influences responses to interpersonal rejection has focused on the moderating role of explicit self-esteem. However, research in the close relationships literature has begun to suggest that our unconscious beliefs about the self can also inform behavioral reactions to rejection. For instance, the sociometer theory contends that the interpersonal system which monitors our inclusionary status works at a preconscious level, suggesting that differences in implicit self-esteem also have the ability to influence how people respond to potential risks of rejection (DeHart et al., 2004; DeHart, Tennen et al., 2009). For example, daily diary research on the implicit sociometer has demonstrated that people low in implicit self-esteem drink more on days they experience more (vs. fewer) negative interpersonal experiences. These researchers suggest that, compared to people with high implicit self-esteem, people with low implicit self-esteem are more reactive to feelings of rejection stemming from the negative interpersonal events they experienced (DeHart, Tennen et al., 2009). Because the potential for interpersonal rejection is inherent in romantic relationship conflict, it seems reasonable to assume that implicit self-esteem will also predict behavioral responses to this type of risky interpersonal experience.

Therefore, much as explicit self-esteem is a conscious indicator of felt security, implicit self-esteem may function as an unconscious, overlearned indicator of one's ability to attain security in romantic relationships (see DeHart et al., 2004; DeHart, Pelham et al., *in press*; DeHart, Tennen et al., 2009). As a non-conscious gauge of chronic (in)securities, implicit self-esteem should influence whether risk regulation

systems implicitly prioritize either connectedness or self-protection goals in response to interpersonal risk. Moreover, though research on the risk regulation model has not assessed whether implicit self-esteem will moderate risk regulation dynamics, other research suggests that the relationship regulation dynamics do exist on an implicit (unconscious) level (see DeHart et al., 2004; DeHart, Tennen et al., 2009). For example, research by DeHart and colleagues (2004) has revealed that people with low self-esteem have more negative implicit evaluations of their romantic partner when experiencing difficulty in their relationship, suggesting that in response to relationship threat, people's implicit beliefs about a romantic partner change in ways similar to their explicit beliefs.

If the moderating role of implicit self-esteem on risk regulation processes mirrors that of explicit self-esteem, we should expect people high in implicit self-esteem to implicitly prioritize connectedness goals, moving closer to their partner in response to relationship threat. Conversely, people low in implicit self-esteem should implicitly prioritize self-protection goals and reduce closeness with their partner in response to relationship threat (Murray et al., 2008). Consistent with this notion, DeHart, Pelham and colleagues (*in press*) suggest people high in implicit self-esteem implicitly evaluate their partners positively because they assume their partners accept them. On the other hand, people low in implicit self-esteem self-protectively regulate their closeness to romantic partners by devaluing implicit evaluations of them (DeHart, Pelham et al., *in press*).

Because implicit self-esteem influences behavior that is relatively unconscious (Pelham & Hetts, 1999; Spalding & Hardin, 1999), the effect of implicit self-esteem on self-regulation dynamics should manifest in behavior that is not consciously controlled,

such as nonverbal behavior. Some support for the effects of implicit self-esteem on nonverbal behavior exists in the attachment literature, which suggests that working models are closely tied to the emission of nonverbal communication in romantic relationships (Bowlby, 1982; Noller, 2005; Noller & Feeney, 1994; Schachner, Shaver, & Mikulincer, 2005). In an observational study, Fraley and Shaver (1998) unobtrusively observed couples' behaviors at an airport before one member of the couple departed. These researchers reported that attachment avoidance was associated with less contact-seeking and more avoidant nonverbal behaviors, such as turning away or reducing eye-contact. Guerro (1996) reported similar results after observing couples as they discussed an important personal problem. Specifically, attachment avoidance was associated with reduced eye-contact and less positive facial expressions. Research looking at nonverbal displays of closeness during romantic relationship interactions has revealed that even when discussing positive aspects of their relationship, insecure individuals (i.e. preoccupied and avoidant) displayed less nonverbal closeness (e.g. less touching and smiling; Tucker & Anders, 1998). Finally, research by Collins and Feeney (2000) reported that, after disclosing a stressful personal problem to a romantic partner, insecure participants engaged in more indirect support seeking behavior, such as fidgeting or sulking.

Presumably, implicit self-esteem will not only moderate risk regulation processes in ways analogous to explicit self-esteem (DeHart et al., 2004; DeHart, Pelham et al., in press), but the effects of implicit self-esteem will be evident in nonverbal channels (Schachner, Shaver, & Mikulincer, 2005). To pursue connectedness goals during

relationship conflict, people high (vs. low) in implicit self-esteem should engage in more positive approach and positive avoidance nonverbal behaviors during relationship conflict. On the other hand, to self-protectively distance themselves from relationship partners, people low (vs. high) in implicit self-esteem should engage in more negative approach and negative avoidance nonverbal behaviors during relationship conflict.

Insecure High Self-esteem and Rejection in Romantic Relationships

Though I suspect the main effects of explicit and implicit self-esteem to be visible through verbal and nonverbal channels respectively, it is important to explore the effects of incongruent self-esteem, specifically high explicit, but low implicit self-esteem (i.e. insecure high self-esteem). In response to interpersonal rejection, differing conscious and unconscious beliefs about the self's worthiness of love and acceptance should increase the tension between needs for connection and needs for self-protection precisely because the two systems prioritize conflicting connectedness and self-protection goals (Murray et al., 2008). Importantly, research suggests that self-regulation processes may occur at an implicit level before occurring at an explicit level (DeHart & Pelham, 2007; DeHart et al., 2004). Specifically, DeHart and colleagues (2004) reported that people low in explicit self-esteem implicitly evaluated their best friend positively only when they reported feeling close to their friend. Moreover, people's implicit evaluations of their best friend were independent of their explicit evaluations, suggesting that implicit evaluations are more sensitive than explicit evaluations to cues of closeness in interpersonal relationships (DeHart et al., 2004). As a result, having low implicit self-

esteem may predispose people high in explicit self-esteem to experience a hidden vulnerability to signs of rejection within their romantic relationship.

Consistent with this idea, research has shown that, for people with high explicit self-esteem, the hidden vulnerability of low implicit self-esteem results in more defensive behaviors (e.g. Jordan et al., 2003). Moreover, theory and research on narcissism, a potential correlate of insecure high self-esteem (Jordan et al., 2003), support the contention that these individuals are more sensitive to rejection and are highly reactive to criticism (Masterson, 1988; Kernis & Sun, 1994). Research has revealed that narcissists are willing to derogate others in an effort to feel better about themselves (e.g. John & Robins, 1994; Kernis & Sun, 1994). For example, in response to an evaluator's negative feedback, narcissists rated the evaluator as more incompetent and less likeable (Kernis & Sun, 1994), suggesting that narcissists, or people with insecure high self-esteem, may also derogate romantic partners in an effort to feel better about themselves.

However, more recent research has revealed that the relationship between implicit self-esteem, explicit self-esteem and narcissism may be more complex than originally presumed. Though some research has supported the contention that, for people with high explicit self-esteem, low implicit self-esteem results in more self-protectively defensive behaviors and more reported narcissism (Bosson et al., 2003; Jordan et al., 2003; Zeigler-Hill, 2006), other research has failed to find this relationship. Recent research by Gregg and Sedikides (2010) reported that implicit and explicit self-esteem did not interact to predict narcissism scores, but were independently related to narcissism. In their research, Gregg and Sedikides found that explicit self-esteem was positively related to narcissism

and implicit self-esteem was negatively related to narcissism. However, a meta-analysis by Boson and colleagues (2008) revealed that implicit self-esteem was positively related to narcissism. Such conflicting findings suggest that though implicit and explicit self-esteem may be related to narcissism, the nature of that relationship is still unclear. Therefore, it seems important to explore both the interaction between implicit and explicit self-esteem and the independent effects of narcissism on behaviors during relationship threat.

Narcissism and Rejection in Romantic Relationships

Research specifically focusing on narcissism and romantic relationships suggests that, in order to maintain power and autonomy in their romantic relationships, narcissists adopt a game playing style of love (e.g. keeping partner uncertain about commitment level; Campbell, Foster, & Finkel, 2002). In a laboratory study, Campbell (1999) found that narcissists prefer romantic partners who are both perfect and admiring, in part because narcissists believe these partners will enhance their self-esteem. Unfortunately, self-report data has revealed that narcissists report not only less commitment in their romantic relationships, but also less accommodation during romantic relationship conflict (Campbell & Foster, 2002). In other words, narcissists are less likely to respond to conflict by discussing the conflict, remaining loyal to their partner, or refraining from negative responses (Campbell & Foster, 2002). Thus, narcissists may use their relationships to maintain an embellished sense of self-worth, but it seems possible that when romantic partners become the source of a self-esteem threat, such as during

relationship conflict, narcissists may respond by being both less accommodating and more defensive.

On the other hand, some research on relationship threat suggests that, because narcissists are more resistant to doubts about a romantic partner's commitment (Foster & Campbell, 2005), they may respond to relationship threat in ways similar to people high in explicit self-esteem. Specifically, Foster and Campbell revealed that narcissists report less relationship dysfunction when a partner's commitment is called into question. Though this resistance is presumably part of narcissist's self-enhancement bias (Foster & Campbell, 2005), such research does seem to suggest that narcissists might behave in ways that affirm the self and the relationship during relationship conflict. However, it remains to be seen whether narcissist's self-enhancement bias will be visible in both self-reported and observer-rated behaviors in response to relationship threat.

CHAPTER FIVE

CURRENT RESEARCH

The goal of the current research is to explore how explicit and implicit self-esteem correspond to people's approach and avoidance verbal and nonverbal behaviors during a relationship conflict interaction. In addition, I also examined whether discrepancies between people's explicit and implicit self-esteem predict verbal and nonverbal behaviors during a conflict interaction. Finally, because recent research on the relation between self-esteem and narcissism has called into question whether the combination of high explicit and low implicit self-esteem represents a more defensive and narcissistic personality (see Bosson, Lakey, Campbell, Ziegler-Hill, Jordan, & Kernis, 2008 for a review; Gregg & Sedikides, 2010), the current study will also explore the effects of narcissism independent from the interaction between implicit and explicit self-esteem.

Hypotheses

Hypothesis 1

I predict that levels of explicit self-esteem will correspond to people's verbal behavior (Pelham & Hetts, 1999). Because research suggests that people who chronically feel more accepted by their partners (i.e. high self-esteem) respond to feelings of rejection by both drawing closer to their partner and refraining from negative behaviors (e.g. Murray, Bellavia et al., 2003), I predict that people high in explicit self-esteem will

engage in more positive approach and positive avoidance verbal behaviors during relationship conflict. Conversely, because research suggests that people low in explicit self-esteem respond to rejection by both derogating (Murray, Bellavia et al., 2003) and reducing closeness with romantic partners (Murray et al., 2002), I predict that people low in explicit self-esteem will engage in more negative approach and negative avoidance verbal behaviors during relationship conflict.

Hypothesis 2

I predict that levels of implicit self-esteem will correspond to people's nonverbal behavior (Pelham & Hetts, 1999; Spalding & Hardin, 1999). Because implicit self-esteem likely moderates risk regulation processes in ways similar to explicit self-esteem (DeHart et al., 2004; DeHart, Pelham et al., *in press*), I predict that people high in implicit self-esteem will engage in more positive approach and positive avoidance nonverbal behaviors during relationship conflict. Conversely, I predict that people low in implicit self-esteem will engage in more negative approach and negative avoidance nonverbal behaviors during relationship conflict.

Hypothesis 3a

Because people with insecure high self-esteem may at times directly experience implicit doubts about their worthiness of love and acceptance (Jordan et al., 2003), and because research suggests these people respond to threat with more defensive behaviors (e.g. Jordan et al., 2005), I have suggested that people with insecure high self-esteem will be more defensive in both verbal and nonverbal channels. Specifically, I predict that

people with insecure high self-esteem will engage in more negative approach verbal and negative approach nonverbal behaviors.

Hypothesis 3b

Related to Hypothesis 3a, I will also explore the effect of narcissism on conflict behaviors independent of the interaction between implicit and explicit self-esteem. Because narcissists respond to threatening social interactions with greater defensiveness (e.g., Campbell & Foster, 2002; Kernis & Sun, 1994), I predict that people higher in narcissism will engage in more negative approach verbal behaviors and negative approach nonverbal behaviors.

Study 1

Study 1 manipulated relationship-threat using an experimental methodology. Study 1 explores the effect of self-esteem (and narcissism) on self-reported verbal and nonverbal behaviors following a relationship-threat (vs. control) condition.

Study 1: Methods

Participants

117 (78 female) undergraduate college students from Loyola University Chicago were recruited from the Psychology 101 participant pool to take part in a study of the self and romantic relationships. Only students currently involved in a monogamous romantic relationship of at least 1 month were recruited for participation. The students' mean age was 20.3 years old ($SD = 2.4$) and the average relationship length was 18.37 months ($SD = 16.7$). The sample was composed of Caucasian or European American (65.8%), Asian American or Asian (12.8%), Hispanic American or Latino (10.3%), African American or

African (3.4%), and multi-racial (7.7%). Participants received partial course credit for participating in the research study.

Overview of Procedure

Participants came to the research lab to complete a series of computer based background surveys, including basic demographic information, measures of explicit and implicit self-esteem and narcissism, and information about their current romantic relationship. Participants were randomly assigned to either the relationship-threat or control conditions. In order to rule out mood as a possible explanation for the results, participants completed a mood measure following either the threat or control condition. In addition, participants indicated how likely it was that they displayed approach and avoidance verbal and nonverbal behaviors during the interaction they described in the threat or control condition. Finally, participants were asked to provide their own first and last name initials.

Measures

Explicit Self-esteem. The 10-item Rosenberg (1965) Self-esteem scale was used to tap explicit self-evaluations (e.g., “I feel that I have a number of good qualities”). Participants responded using a 7-point scale (1 = strongly disagree, 7 = strongly agree). Negative items were reverse-scored, such that higher scores indicated higher self-esteem ($\alpha = .88$). Please see Appendix A for full measure.

Implicit Self-esteem. The Name-Letter Measure of implicit self-esteem was used to assess implicit evaluations of the self (Kitayama & Karasawa, 1997; Koole et al., 2001). Participants rated their preferences for each of the 26 letters of the alphabet.

Participants were told that these ratings would be used “to develop stimuli for future studies of linguistic and pictorial preferences.” In addition, participants were instructed to “trust your intuitions, work quickly, and report your gut impressions.” Participants then reported their liking for every letter of the alphabet using a 7-point scale (1 = dislike very much, 7 = like very much). A liking score was computed from the difference between each participant’s rating of his or her own first and last name initials and the mean liking for these two letters provided by people whose names did not include that letter (thus, more positive numbers indicate higher name-letter preferences). Participants’ name-letter preferences were computed by taking the average liking scores for their first and last name initials. This two-item indicator of implicit self-esteem showed adequate internal consistency ($r = .27, p < .01$). Please see Appendix A for full measure.

Narcissism. Narcissism was assessed with the Narcissistic Personality Inventory (Raskin & Hall, 1979). This measure consists of 40 items that participants indicate as either true or false (e.g., “If I ruled the world, it would be a much better place,” “I am going to be a great person,” “I am more capable than other people”). The scale is coded so that higher scores indicate higher levels of narcissistic personality ($\alpha = .84$). Please see Appendix A for the full measure.

Own Commitment. 1-item was used to assess participants’ own commitment to the relationship. Participants indicated how committed they are to their current romantic relationship on a scale from 1(not at all committed) to 7 (very committed).

Perceived Partner Commitment. 1-item was used to assess participants’ perceptions of their partners’ commitment to the relationship. Participants indicated how

committed they believed their partner is to their current romantic relationship on a scale from 1 (not at all committed) to 7 (very committed).

Relationship-threat Manipulation. Participants were randomly assigned to either the relationship-threat manipulation (adapted from Murray et al., 2008) or the control manipulation. Participants in the relationship-threat condition were asked to think of an interaction with their romantic partner where they felt intensely disappointed, hurt, or let down by their romantic partner. Participants were asked to think of the event in their life that best fit this description and then write three or more detailed sentences to describe the situation and how it came about. Though different than an actual conflict interaction, the relationship-threat manipulation should be conceptually similar to conflict in its ability to elicit feelings of rejection. Previous research has shown that this manipulation successfully elicits rejection in people (e.g., Murray et al., 2008). Participants in the control condition were asked to write three or more sentences that provided a basic description of the last interaction they had with their romantic partner.

Approach Verbal Behaviors. 10-items were adapted from the Rapid Marital Interaction Coding System (RMICS; Heyman & Vivian, 2000) and used to tap approach verbal behaviors. Participants were presented with 5 positive approach verbal behaviors (e.g., “expressed understanding for your partner’s view or behaviors,” “rephrased what your partner said in your own words,” “reassured your partner of your love,” “put a positive spin on the conversation”) and 5 negative approach verbal behaviors (e.g. “criticized your partner,” “complained about your partners personality or character,” “insulted your partner or name called,” “snapped or yelled at your partner,” “responded

sarcastically to your partner”). Participants indicated how likely it was that they displayed each behavior during the interaction they just described (1 = definitely did not happen, 7 = definitely did happen). The 5 positive approach verbal items were combined such that higher scores indicated higher reported positive approach verbal behaviors ($\alpha = .77$). The 5 negative approach verbal items were combined such that higher scores indicated higher reported negative approach verbal behaviors ($\alpha = .84$).

Avoidant Verbal Behaviors. 5-items were developed specifically for the current study to tap positive avoidant behaviors. In addition, 5-items were adapted from the RMICS (Heyman & Vivian, 2000) to tap negative avoidant behaviors. Participants were presented with 5 positive avoidant verbal behaviors (“joked or used humor,” “expressed a desire to cool down before talking,” “indicated you needed to be alone before you can discuss this together,” “indicated you wanted to talk later, after you’ve had time to think,” “drew attention to other positive aspects of the relationship”) and 5 negative avoidant verbal behaviors (“tried to change subject in order to avoid the conversation,” “told your partner you didn’t want to discuss the issue anymore,” “told your partner you wouldn’t listen to them anymore,” “told your partner to shut up or stop talking to avoid hearing their side,” “brought up a completely unrelated topic to avoid discussing the issue”). Participants indicated how likely it was that they displayed each behavior during the interaction they just described (1 = definitely did not happen, 7 = definitely did happen).

The 5 positive avoidant verbal items were combined such that higher scores indicated higher reported positive avoidant verbal behaviors. However, the 5-item indicator of positive avoidant verbal behaviors did not show acceptable internal

consistency, therefore, the humor item was dropped from the measure. The remaining 4 items had good internal consistency ($\alpha = .70$). The 5 negative avoidant verbal items were combined such that higher scores indicated higher reported negative avoidant verbal behaviors ($\alpha = .88$).

Approach Nonverbal Behaviors. 10-items were adapted from the Rapid Marital Interaction Coding System (RMICS; Heyman & Vivian, 2000) and used to tap approach nonverbal behaviors. Participants were presented with 5 positive approach nonverbal behaviors (e.g., “maintained eye contact with your partner,” “moved or leaned closer your partner,” “affectionately touched your partner,” “smiled at your partner,” “nodded your head affirmatively while partner speaks”) and 5 negative approach nonverbal behaviors (e.g., “rolled your eyes,” “shook your head in disagreement,” “sighed,” “frowned or scowled at partner,” “used a negative or angry tone”). Participants indicated how likely it was that they displayed each behavior during the interaction they just described (1 = definitely did not happen, 7 = definitely did happen). The 5 positive approach nonverbal items were combined such that higher scores indicated higher reported positive approach nonverbal behaviors ($\alpha = .90$). The 5 negative approach nonverbal items were combined such that higher scores indicated higher reported negative approach nonverbal behaviors ($\alpha = .91$).

Avoidant Nonverbal Behaviors. 5-items were developed specifically for the current study to tap positive avoidant nonverbal behaviors. In addition, 5-items were adapted from the RMICS (Heyman & Vivian, 2000) to tap negative avoidant nonverbal behaviors. Participants were presented with 5 positive avoidant nonverbal behaviors

(“walked away from partner in order to cool down,” “refrained from talking to avoid saying something negative to your partner,” “controlled negative body movements,” “stopped talking in order to gather your thoughts,” “walked away from your partner for a moment to calm down”) and 5 negative avoidant nonverbal behaviors (“folded or crossed your arms,” “moved away from your partner,” “reduced eye contact with or looked away from your partner,” “refrained from talking or responding to your partner,” “got tense or stopped moving”). Participants indicated how likely it was that they displayed each behavior during the interaction they just described (1 = definitely did not happen, 7 = definitely did happen). The 5 positive avoidant nonverbal items were combined such that higher scores indicated higher reported positive avoidant nonverbal behaviors ($\alpha = .88$). The 5 negative avoidant nonverbal items were combined such that higher scores indicated higher reported negative avoidant nonverbal behaviors ($\alpha = .88$).

Mood. Participants reported their mood (1 = extremely negative, 7 = extremely positive) directly following the threat or control manipulation.

Study 1: Results

Multiple Regression Analyses

To test my hypotheses, I conducted a series of multiple regression analyses using the procedures outlined by Aiken & West (1991). Specifically, I centered each of the continuous predictor variables by subtracting the appropriate sample means. I then conducted simultaneous regression analyses predicting each dependent variable from the centered main effects of explicit self-esteem, implicit self-esteem, relationship threat condition (1 = *threat*, -1 = *control*), and all of the possible interaction terms. In this way,

I was able to test my hypotheses for explicit and implicit self-esteem while also testing my hypotheses for the interaction between implicit and explicit self-esteem.¹ Because gender was significantly related to many of the dependent measures of behavior, all analyses presented control for gender. Mood was also controlled for in each analysis in order to ensure that effects are due to levels of explicit and implicit self-esteem and not mood.² Finally, all analyses controlled for the positive or negative behavior opposite of the criterion behavior. For example, when predicting positive approach verbal behaviors, I controlled for the effect of negative approach verbal behaviors.

Self-esteem and Self-reported Verbal Behaviors

Approach Verbal Behaviors

Does self-esteem influence people's reports of the positive approach verbal behaviors they engage in during a threatening interaction with their partner? To test this idea, I ran a regression analysis predicting positive approach verbal behaviors from the three-way interaction between explicit self-esteem, implicit self-esteem, and condition (and all of the 2-way interactions and main effects). This analysis failed to reveal any significant main effects or interaction terms (all β 's \leq .30, β 's \leq .12, p 's $>$.05).

Next, a multiple regression analysis was run on the measure of negative approach verbal behaviors. This analysis revealed a main effect for gender ($\beta = .68$, $\beta = .20$, $p < .05$), indicating that females were more likely to report engaging in negative approach verbal behaviors than males, and a main effect of condition ($\beta = .68$, $\beta = .20$, $p < .05$),

¹ None of the background variables differed by condition.

² Neither gender nor mood moderated any of the effects that are reported.

indicating participants in the relationship-threat condition reported more negative approach verbal behaviors than participants in the control condition. In addition, there was a main effect of explicit self-esteem ($\underline{B} = -.32$, $\underline{\beta} = -.20$, $p < .05$), such that participant with higher (vs. lower) explicit self-esteem reported fewer negative approach verbal behaviors. There were no other significant main effects or interaction terms (all \underline{B} 's $\leq .19$, $\underline{\beta}$'s $\leq .16$, p 's $> .05$).

Avoidant Verbal Behaviors

A multiple regression analysis was run on the measure of positive avoidant verbal behaviors. As shown on the left side of Table 3, the analysis showed significant main effects for mood, condition, and negative avoidant verbal behaviors. However, this analysis failed to reveal any significant interaction terms.

Next, a regression analysis was run on the measure of negative avoidant verbal behavior (see right side of Table 3). This analysis revealed main effects for positive avoidant verbal behaviors and condition. In addition, there was a significant Explicit Self-esteem X Condition interaction. Neither the two-way Implicit X Condition interaction nor the three-way Explicit Self-esteem X Implicit Self-esteem X Condition interaction was significant. Because only the Explicit Self-esteem X Condition two-way interaction was significant, the other interaction terms were dropped from the model. Dropping these terms did not change any of the results presented here. The new model again revealed the significant Explicit Self-esteem X Condition interaction predicting negative avoidant verbal behaviors ($\underline{B} = -.24$, $\underline{\beta} = -.16$, $p < .05$).

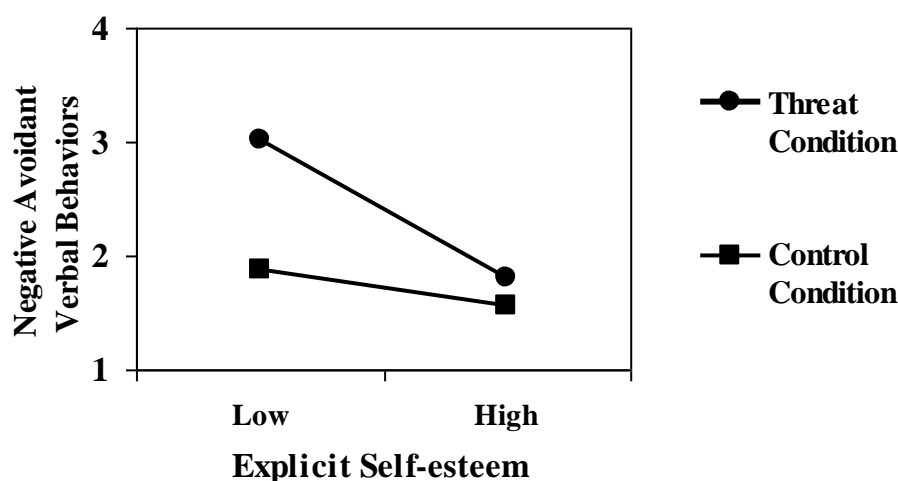
Table 3. Multiple Regression Results for Explicit Self-esteem, Implicit Self-esteem and Condition predicting Avoidant Verbal Behaviors

	<u>Avoidant Verbal Behaviors</u>					
	Positive (DV)			Negative (DV)		
	<u>B</u>	<u>β</u>	<u>t</u>	<u>B</u>	<u>β</u>	<u>t</u>
Intercept	2.778**		13.254	2.100**		10.910
Gender	.413	.123	1.620	.180	.059	.769
Mood	-.195*	-.191	-2.446	.147*	.159	2.017
Negative Avoidant Verbal	.564**	.514	6.159	--	--	--
Positive Avoidant Verbal	--	--	--	.467**	.513	6.159
Condition	.274*	.173	2.123	.195	.135	.1647
Explicit Self-esteem	.080	.0048	.609	-.367**	-.243	-3.205
Implicit Self-esteem	.005	.005	.006	.007	.007	.087
Explicit Self-esteem X Condition	.174	.172	.105	-.243*	-.160	-2.131
Implicit Self-esteem X Condition	.087	.080	1.055	-.110	-.111	-1.437
Explicit Self-esteem X Implicit Self-esteem	-.006	-.005	-.067	.026	.024	.325
Explicit Self-esteem X Implicit Self-esteem X Condition	.118	.098	1.300	-.001	.000	-.013

Note. † p < .10 * p < .05 ** p < .01

The nature of the two-way interaction was determined using the procedures outlined by Aiken and West (1991). Specifically, I separately tested the significance of the simple slope of explicit self-esteem predicting negative avoidant verbal behaviors in the relationship-threat and control conditions. As suggested by the regression lines in Figure 1, simple slopes tests revealed that explicit self-esteem was inversely associated with negative avoidant verbal behaviors in the relationship-threat condition ($B = -.63$, $\beta = -.34$, $p < .01$). Self-esteem was unrelated to negative avoidant verbal behaviors in the control condition ($B = -.17$, $\beta = -.18$, $p = .12$). In support of Hypothesis 1, these results suggest that participants low (vs. high) in explicit self-esteem reported engaging in significantly more negative avoidant verbal behaviors (e.g., changing the subject, refusing to listen) during a negative interaction with their romantic partner. Participants high and low in explicit self-esteem did not differ in their reports of negative avoidant verbal behaviors in the control condition.

Figure 1. Predicting negative avoidant verbal behaviors from the interaction between self-esteem and relationship threat condition.



*Self-esteem and Self-reported Nonverbal Behaviors**Approach Nonverbal Behaviors*

To determine if people's self-esteem influences reports of the approach nonverbal behaviors, a regression analysis was run on the measure of positive approach nonverbal behavior. Analyses revealed significant main effects for negative approach nonverbal behavior ($\underline{B} = -.30$, $\underline{\beta} = -.30$, $p < .01$) and condition ($\underline{B} = -.58$, $\underline{\beta} = -.29$, $p < .01$). However, there were no other significant main effects and no significant interaction terms (all \underline{B} 's $\leq .22$, $\underline{\beta}$'s $\leq .16$, p 's $> .05$). An additional regression analysis was run on the measure of negative approach nonverbal behaviors. This analysis revealed a main effect of gender ($\underline{B} = 1.09$, $\underline{\beta} = .26$, $p < .01$), suggesting female participants reported more negative approach nonverbal behaviors. However, the predicted interaction terms were not significant (all \underline{B} 's $\leq .15$, $\underline{\beta}$'s $\leq .11$, p 's $> .05$).

Avoidant Nonverbal Behaviors

To determine if people's self-esteem influences reports of avoidant nonverbal behaviors, a regression analysis was run on the measure of positive avoidant nonverbal behavior. However, there were no significant interaction terms (all \underline{B} 's $\leq .13$, $\underline{\beta}$'s $\leq .07$, p 's $> .05$). An additional regression analysis was run on the measure of negative avoidant nonverbal behaviors. Again, the multiple regression analysis failed to reveal any significant interaction terms (all \underline{B} 's $\leq .16$, $\underline{\beta}$'s $\leq .11$, p 's $> .05$).

*Self-esteem, Partner Commitment, and Self-reported Behaviors**Preliminary Analyses*

Perceptions of a partner's level of commitment might influence the need for risk regulation processes. Specifically, if a participant does not feel their partner is invested in the relationship at the outset, risk regulation dynamics may not be necessary to navigate feelings elicited from the relationship-threat manipulation in this experiment (an issue addressed further in the general discussion section). Therefore, I ran some preliminary analyses examining the main effects of self-esteem, perceived partner commitment, condition and all of the possible interaction terms predicting verbal and nonverbal behaviors. Perceptions of partner commitment did not moderate the relation between explicit self-esteem and condition predicting any of the dependent behaviors. However, these preliminary analyses did reveal a significant 3-way interaction between implicit self-esteem, perceived partner commitment and condition predicting several of the positive verbal and nonverbal dependent measures. This 3-way interaction did not predict any of the negative verbal or negative nonverbal dependent measures.³

Positive Verbal Behaviors

As shown in the left side of Table 4, the multiple regression analyses run on the measure of positive approach verbal behaviors revealed a main effect for partner commitment. In addition, there was a significant three-way Implicit Self-esteem X Partner Commitment X Condition interaction.

³ I explored whether participant's own commitment and the combined own and perceived partner commitment ($\alpha = .67$) moderated the relationship between implicit self-esteem and condition predicting positive verbal and nonverbal behaviors. Only perceived partner commitment was a significant moderator of this effect.

Table 4. Multiple Regression Results for Implicit Self-esteem, Partner Commitment and Condition predicting Positive Approach and Avoidant Verbal Behaviors

	<u>Verbal</u>					
	Positive Approach (DV)			Positive Avoidant (DV)		
	<u>B</u>	<u>β</u>	<u>t</u>	<u>B</u>	<u>β</u>	<u>t</u>
Intercept	4.561**		18.758	2.846**		14.046
Gender	.144	.044	.463	.289	.086	1.125
Mood	-.004	-.004	-.040	-.164*	-.160	-2.013
Negative Approach Nonverbal	.051	.052	.513	--	--	--
Negative Avoidant Nonverbal	--	--	--	.511**	.465	5.923
Condition	-.219**	-.141	-1.357	.298*	.188	2.300
Implicit Self-esteem	.183 [†]	.173	1.875	-.030	-.028	-.366
Partner Commitment	.317**	.196	1.958	-.044	-.027	-.325
Implicit Self-esteem X Condition	.018	.017	.181	.096	.088	1.162
Partner Commitment X Condition	-.170	-.105	-1.096	.137	.083	1.015
Implicit Self-esteem X Partner Commitment	.200 [†]	.182	1.939	.077	.069	.886
Implicit Self-esteem X Partner Commitment X Condition	.232*	.208	2.206	.177*	.155	1.995

Note. [†] $p < .10$ * $p < .05$ ** $p < .01$

I determined the nature of the three-way interaction by separately testing the significance of the Implicit Self-esteem X Partner Commitment two-way interaction in the control and relationship-threat conditions. In the control condition, there was a non-significant Implicit Self-esteem x Partner Commitment interaction ($B = -.04$, $\beta = -.04$, $p = .75$) predicting positive approach verbal behaviors (see Figure 2). In the relationship threat condition, there was a significant Implicit Self-esteem x Partner Commitment interaction ($B = .44$, $\beta = .36$, $p < .01$) predicting positive approach verbal behaviors (see Figure 3). The simple slope tests revealed that implicit self esteem was positively related to positive approach verbal behaviors when partner commitment was high ($B = .65$, $\beta = .56$, $p < .01$), but not when partner commitment was low ($b = -.28$, $\beta = -.24$, $p = .26$). These results provide partial support for Hypothesis 2 and suggest that implicit self-esteem influences risk regulation processes only when participants perceived their partner was committed to the relationship. However, these results also suggest that implicit self-esteem may not be specific to nonverbal behavior, as Hypothesis 2 predicted.

Figure 2. Predicting positive approach verbal behaviors from the interaction between self-esteem and partner commitment in the control condition.

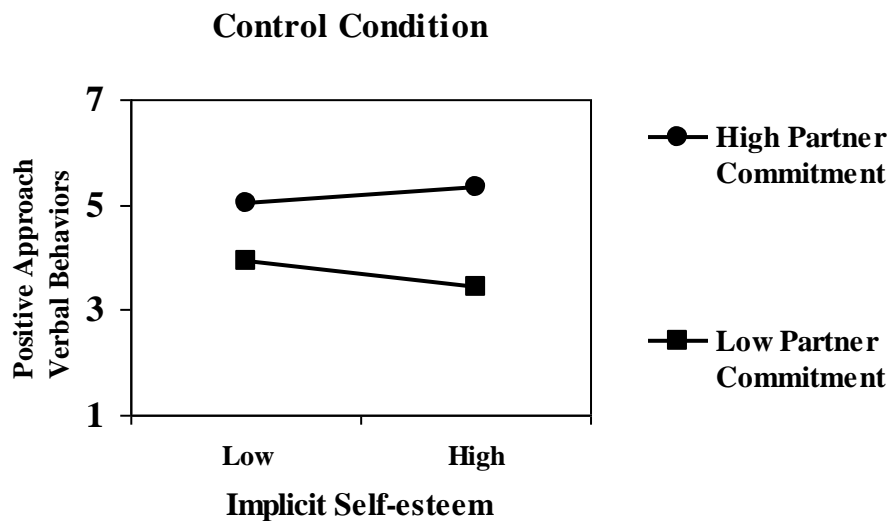
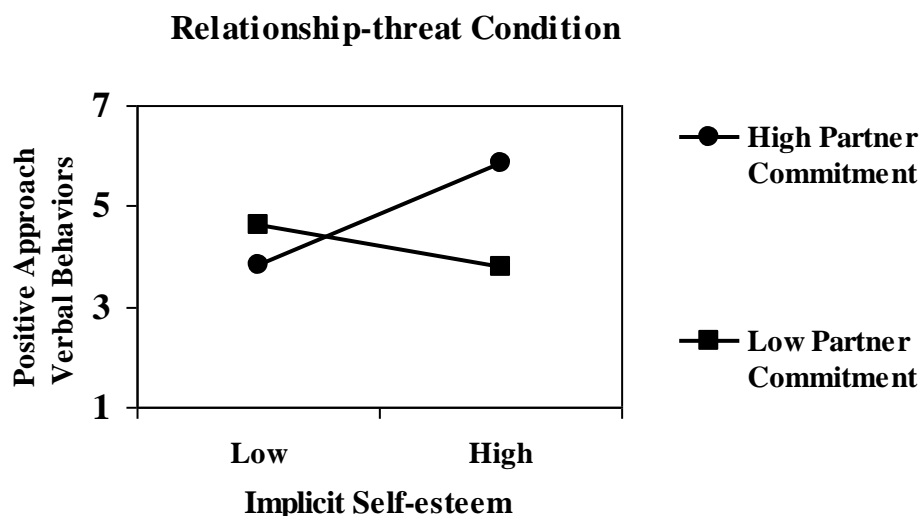


Figure 3. Predicting positive approach verbal behaviors from the interaction between self-esteem and partner commitment in the relationship-threat condition.



When this model was re-run predicting positive avoidant verbal behaviors, the same pattern of results emerged. As shown in the right side of Table 4, there was a significant three-way Implicit Self-esteem X Partner Commitment X Condition interaction. In the control condition, there was a non-significant Implicit Self-esteem x Partner Commitment interaction ($B = -.12$, $\beta = -.14$, $p = .27$) predicting positive avoidant verbal behaviors. In the relationship-threat condition, there was a marginally significant Implicit Self-esteem x Partner Commitment interaction ($B = .24$, $\beta = .20$, $p = .08$) predicting positive avoidant verbal behaviors. The simple slope tests revealed that implicit self-esteem was positively related to positive avoidant verbal behaviors when partner commitment was high ($B = .32$, $\beta = .29$, $p = .07$), but not when partner commitment was low ($B = -.18$, $\beta = -.16$, $p = .40$). Again, these findings suggest that implicit self-esteem influences positive verbal behavior in ways consistent with the risk

regulation dynamics, but only when participants perceive their partner as committed to the relationship.

Positive Nonverbal Behaviors

The model was also run predicting positive approach nonverbal behaviors. This analysis revealed a pattern of results that mirrored the results for positive approach and positive avoidant verbal behaviors. As shown in left side of Table 5, there was a marginally significant three-way Implicit Self-esteem X Partner Commitment X Condition interaction predicting positive approach nonverbal behaviors. In the control condition, there was a non-significant Implicit Self-esteem x Partner Commitment interaction ($B = .05$, $\beta = .04$, $p = .75$; see Figure 4). However, in the relationship-threat condition, there was a significant Implicit Self-esteem x Partner Commitment interaction ($B = .44$, $\beta = .36$, $p < .01$) predicting positive approach nonverbal behaviors (see Figure 5). The simple slope tests revealed that implicit self esteem was positively related to positive approach nonverbal behaviors when partner commitment was high ($B = .68$, $\beta = .60$, $p < .01$), but not when partner commitment was low ($B = -.23$, $\beta = -.20$, $p = .33$). These results again provide partial support for Hypothesis 2, indicating that when partner commitment is high, implicit self-esteem influences positive approach nonverbal behavior in ways consistent with the risk regulation model.

Finally, the model was tested predicting positive avoidant nonverbal behaviors (see right side of Table 5). Though the multiple regression analysis revealed a significant main effect of negative avoidant nonverbal behaviors and condition, the pattern of results did not replicate for positive avoidant nonverbal behaviors.

Table 5. Multiple Regression Results for Implicit Self-esteem, Partner Commitment and Condition predicting Positive Approach and Avoidant Nonverbal Behaviors

	<u>Nonverbal</u>					
	Positive Approach (DV)			Positive Avoidant (DV)		
	<u>B</u>	<u>β</u>	<u>t</u>	<u>B</u>	<u>β</u>	<u>t</u>
Intercept	4.574**		17.249	2.800**		14.958
Gender	.102	.025	.303	.454 [†]	.120	1.915
Mood	-.038	-.030	-.362	-.127	-.111	-1.631
Negative Approach Nonverbal	-.275**	-.273	-2.666	--	--	--
Negative Avoidant Nonverbal	--	--	--	.507**	.506	6.654
Condition	-.656**	-.333	-3.412	.459**	.259	3.553
Implicit Self-esteem	.226*	.167	2.156	-.026	-.021	-.339
Partner Commitment	.279	.136	1.632	-.161	-.087	-1.299
Implicit Self-esteem X Condition	.004	.003	.038	-.076	-.063	-1.012
Partner Commitment X Condition	-.396*	-.193	-2.373	.209 [†]	.122	1.704
Implicit Self-esteem X Partner Commitment	.241*	.172	2.178	-.002	-.002	.975
Implicit Self-esteem X Partner Commitment X Condition	.232 [†]	.208	2.206	.046	.036	.563

Note. [†] $p < .10$. * $p < .05$. ** $p < .01$.

Figure 4. Predicting positive approach nonverbal behaviors from the interaction between self-esteem and partner commitment in the control condition.

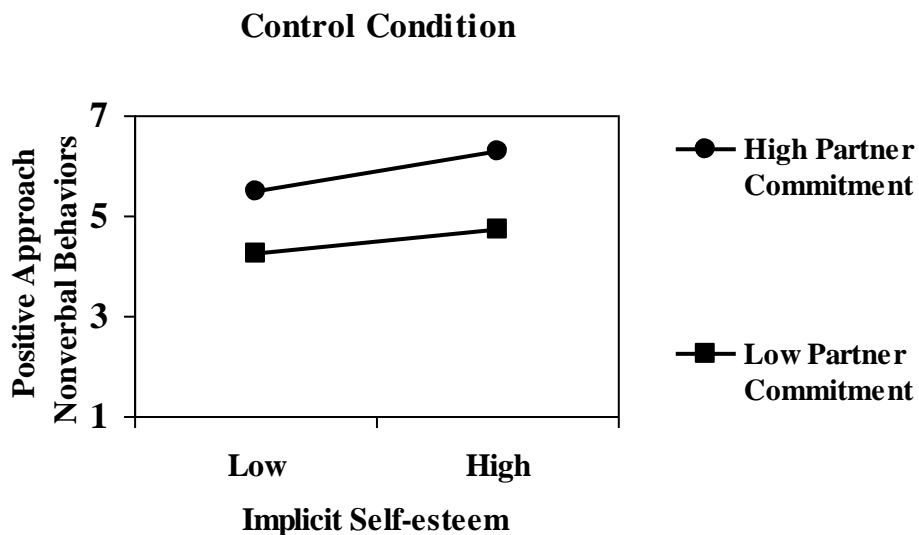
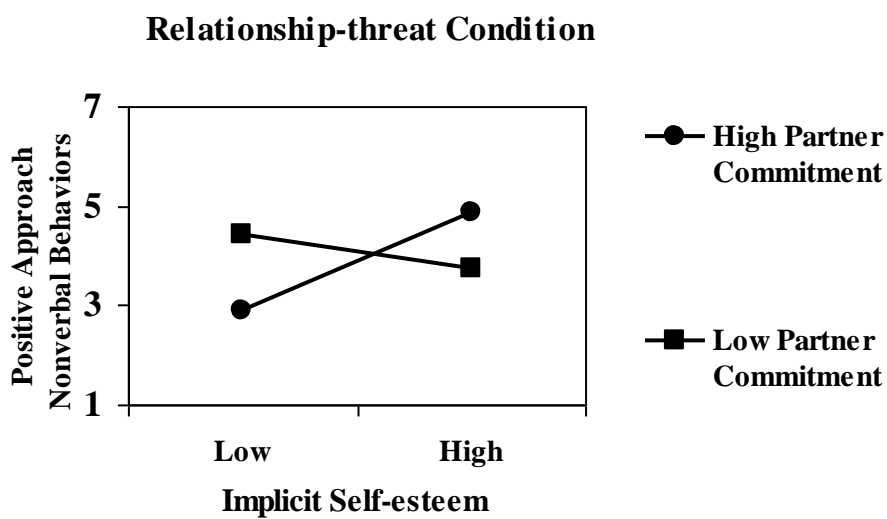


Figure 5. Predicting positive approach nonverbal behaviors from the interaction between self-esteem and partner commitment in the relationship-threat condition.



Narcissism and Self-reported Verbal Behaviors

To determine if narcissism interacted with condition to predict verbal behaviors during a threatening romantic relationship interaction, I ran multiple regression analyses predicting each of the positive and negative approach and avoidant verbal behaviors. These analyses revealed a significant 2-way interaction between narcissism and condition predicting reported negative approach verbal behaviors. This 2-way interaction did not predict any of the other verbal dependent measures.

Negative Approach Verbal Behaviors

As shown in Table 6, the multiple regression analyses run on the measure of negative approach verbal behaviors revealed main effects for gender and condition, and the significant two-way Narcissism X Condition interaction.

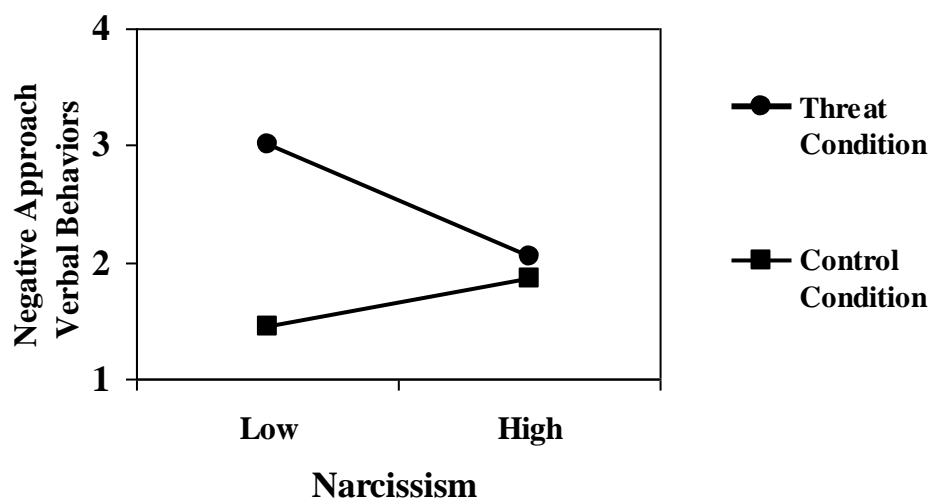
Table 6. Multiple Regression Results for Narcissism and Condition predicting Negative Approach Verbal Behaviors

	Negative Approach Verbal Behaviors (DV)		
	<u>B</u>	<u>β</u>	<u>t</u>
Intercept	2.10**		9.71
Gender	.88**	.26	3.26
Mood	-.09	.09	-1.01
Positive Approach Verbal	-.03	-.03	-.43
Condition	.59**	.37	4.46
Narcissism	-.02	-.08	-.95
Narcissism X Condition	-.05*	-.19	-2.42

Note. † $p < .10$. * $p < .05$. ** $p < .01$.

As suggested by the regression lines in Figure 6, simple slopes tests revealed that narcissism was inversely associated with negative approach verbal behaviors in the relationship-threat condition ($B = -.08$, $\beta = -.27$, $p < .05$). Narcissism was unrelated to negative approach verbal behaviors in the control condition ($B = .03$, $\beta = .17$, $p = .16$). In contrast to the predictions made in Hypothesis 3b, these findings suggest that narcissists report engaging in fewer negative approach verbal behaviors (e.g., criticism, name-calling, etc.) during a threatening interaction with their romantic partner. These results are consistent with some previous research showing narcissists are more resistant to doubts about a romantic partner's commitment (Foster & Campbell, 2005). Narcissism did not interact with condition to predict any of the nonverbal dependent measures.⁴

Figure 6. Predicting negative approach verbal behaviors from the interaction between narcissism and relationship-threat condition.



⁴ All analyses with narcissism were first run controlling for explicit self-esteem, implicit self-esteem and the interaction between explicit and implicit self-esteem. Controlling for these main effects and interaction did not change any of the results presented here.

Alternative Explanation

I have suggested that, after relationship threat, self-esteem and narcissism influence relationship regulation processes, resulting in certain positive and negative verbal and nonverbal behaviors. An alternative explanation for the effects presented here is that participants low (vs. high) in self-esteem and high (vs. low) in narcissism had more negative moods after the relationship-threat manipulation, causing them to *report* engaging in more negative and less positive behaviors. To rule out mood as a potential explanation for the findings, I ran three separate regression analyses exploring whether explicit self-esteem, implicit self-esteem or narcissism interacted with condition to predict participant mood.

First, I examined the main effects of explicit self-esteem, condition, and the interaction between explicit self-esteem and condition predicting mood. The analysis revealed only a significant main effect of condition ($B = -.39$, $\beta = -.25$, $p < .01$) and a non-significant Explicit Self-esteem X Condition interaction ($B = .14$, $\beta = -.09$, $p = .33$). Similarly, the analysis examining the main effects of implicit self-esteem, condition and the interaction between implicit self-esteem and condition revealed only a significant main effect of condition ($B = -.37$, $\beta = -.24$, $p < .01$), and a non-significant Implicit Self-esteem X Condition interaction ($B = -.04$, $\beta = -.04$, $p = .69$). Finally, the analysis examining the main effects of narcissism, condition and their interaction revealed only a main effect of condition ($B = -.39$, $\beta = -.25$, $p < .01$), and a non-significant Narcissism X Condition interaction ($B = .003$, $\beta = .01$, $p = .90$). These analyses suggest mood is not a viable alternative explanation for the findings.

Study 1: Discussion

Though I failed to find the hypothesized effect of explicit self-esteem on reports of positive approach verbal, negative approach verbal or positive avoidant verbal behaviors following the threat manipulation, I did find the hypothesized pattern of results predicting reports of negative avoidant verbal behaviors (e.g., changing the subject, avoiding the conversation). Specifically, participants low in explicit self-esteem reported more negative avoidant verbal behaviors than their high self-esteem counterparts in the relationship-threat condition. Conversely, participants high and low in explicit self-esteem did not differ in their reports of negative avoidant verbal behaviors in the control condition. These findings provide partial support for the idea that participants low in explicit self-esteem report responding to a threatening interaction with their romantic partner by engaging in more negative verbal behaviors (Hypothesis 1).

I did not find support for the hypothesized interaction between implicit self-esteem and condition predicting the positive and negative approach and avoidance nonverbal behaviors (Hypothesis 2). However, preliminary analyses revealed that perceived partner commitment moderated the effect of implicit self-esteem on positive approach verbal behaviors (e.g., expressed love and understanding for partner), positive avoidant verbal behaviors (e.g., drew attention to other positive aspects of relationship), and positive approach nonverbal behaviors (e.g., smiled, leaned closer to partner) in the relationship-threat (vs. control) condition. That is, implicit self-esteem had a significant positive relation to reports of positive approach and positive avoidant verbal and positive approach nonverbal behaviors when partner commitment was high, but not when partner

commitment was low. Consistent with Hypothesis 2, these results suggest that implicit self-esteem influences risk regulation dynamics, but only for those participants who perceived their partner as more committed to the relationship. These results also suggest that implicit self-esteem may leak into reports of verbal as well as nonverbal behaviors.

Though I did not find the hypothesized interaction between implicit and explicit self-esteem predicting negative approach verbal and nonverbal behaviors (Hypothesis 3a), analyses did reveal that narcissism interacted with condition to predict negative approach verbal behaviors (Hypothesis 3b). Interestingly, people higher in narcissism reported engaging in fewer negative approach verbal behaviors (e.g., criticizing, name-calling) in the relationship-threat condition, suggesting that narcissists may preserve feelings of self-worth by defensively reporting they engaged in fewer negative behaviors during a threatening interaction with their partner.

Because Study 1 employed a self-report methodology, results can only inform us how self-esteem and narcissism influence people's reporting of behavior (not the behavior itself). Because much of the research on romantic relationship conflict has used an observational methodology to explore how the self influences conflict responses (e.g., Collins & Feeney, 2000; Simpson et al., 1996), the effects of the self on conflict interactions are based on observer-rated, not self-reported, behaviors. Therefore, in Study 2, I sought to expand on findings from Study 1 by having participants engage in an actual conflict interaction. In addition, instead of having participants report on their own behaviors, conflict interactions in Study 2 were videotaped and coded by independent raters for the approach and avoidance verbal and nonverbal behaviors.

Study 2

Study 2 uses an observational methodology to expand on the results of Study 1. Study 2 explores how explicit self-esteem, implicit self-esteem, the interaction between implicit and explicit self-esteem predict people's approach and avoidance verbal and nonverbal behaviors during an actual relationship conflict. In addition, Study 2 will further investigate the moderating role of perceived partner commitment on the relation between implicit self-esteem and risk regulation processes during romantic relationship conflict. Study 2 will also explore the independent effects of narcissism on the verbal and nonverbal conflict behaviors. Finally, Study 2 includes post-conflict measures, allowing me to explore the effects of the self on perceptions of the relationship and feelings of rejection following a conflict interaction.

Study 2: Methods

Participants

204 undergraduate college students (102 couples) currently involved in a monogamous romantic relationship of at least 2 months were recruited from Loyola University Chicago to take part in a study on Romantic Relationship Interactions. The students' mean age was 20.73 years old ($SD = 1.52$) and the average relationship length was 19.95 months ($SD = 16.53$). Of the 204 couples, 200 couples were heterosexual and 4 couples were homosexual. In addition, 95.1% of participants reported that their romantic relationship was monogamous, and 26.5% reported that their relationship was

long-distance.⁵ The majority of couples were dating and not living together (93.1%), versus dating and living together (6.4%) or married and living together (.5%). The sample was composed of Caucasian or European American (74.5%), Asian American or Asian (8.3%), Hispanic American or Latino (7.8%), African American or African (4.4%), and multi-racial (4.9%).

Participants from the psychology participant pool received a \$5.00 gift card and 1 credit toward the research requirement for their psychology 101 class. Their romantic partners received a \$10.00 gift card for participating in the study. Couples recruited from outside of the participant pool received two \$10.00 gift cards for participation in the study. In addition, every couple was entered in a lottery with two chances to win \$50.00.

Overview of Procedure

Couples participating in the study arrived at the lab and independently completed a series of background measures, including demographic information, measures of relationship commitment, and measures of explicit self-esteem, implicit self-esteem and narcissism. The last item of the questionnaire packet asked each member of the couple to independently identify an issue that was a recent source of major disagreement in their relationship. They were instructed that this issue should represent the most heated and unresolved issue in their relationship to date. Partners were then brought back together and the researcher randomly selected one of the topics for the conflict discussion by flipping a coin (Powers, Pietromanaco, Gunlicks & Sayer, 2006).

⁵ Dropping the homosexual and non-monogamous couples from the analyses did not change the pattern of findings. In addition, relationship length and being in a long distance relationship did not moderate any of the results presented here.

After the issue was chosen for discussion, participants were told to think about the last major argument they had about this topic and then try to resolve it. The specific instructions were as follows: “Remember what you were arguing about and why you were upset with your partner. Remember what you were thinking about and how you felt during the argument. After remembering these things, we would like you to discuss the issue with each other. We’d like each of you to tell the other what it is about his or her attitudes, habits, or behaviors that bothers you. Please discuss the issue in detail” (Simpson et al., 1996). Couples were told that though no one would be in the room while their interaction took place, it would be videotaped and coded later.

After the discussion session (7 minutes), participants completed a series of post-conflict measures, including post-conflict love, satisfaction, and mood, as well as their perceptions of rejection during the interaction. Finally, a positive conversation task was introduced to help couples recover from any negative affect left over from the conflict discussion. The researcher instructed participants to “take a minute and think about several positive aspects of your partner and your relationship and tell your partner what it is about his or her attitudes, habits, or behaviors that you really enjoy.” Participants were asked to discuss these positive aspects in detail for 5 minutes. Following the positive discussion task, participants were compensated and fully debriefed about the nature of the study. All participants were asked to sign a video release form if they agreed to have their conflict discussion included in the study.⁶

⁶ Though not part of the dissertation, I contacted participants 5 months after the completion of Study 2 to obtain follow-up information about relationship satisfaction and break-up.

Independent raters coded for the specific positive and negative approach and avoidance verbal behaviors, and positive and negative approach and avoidance nonverbal behaviors (RMICS; Heyman & Vivian, 2000).

Measures

Study 2 included the measures of explicit self-esteem, implicit self-esteem and narcissism that were used in Study 1 (Appendix A), as well as background questions about the romantic relationship, relationship commitment, love and satisfaction (Appendix B), and several post-conflict measures of love, satisfaction, mood, and interpersonal vulnerability (Appendix C).

Explicit Self-esteem. The 10-item Rosenberg (1965) Self-esteem scale was used to tap explicit self-evaluations ($\alpha = .89$).

Implicit Self-esteem. The Name-Letter Measure of implicit self-esteem was used to assess implicit evaluations of the self (Kitayama & Karasawa, 1997; Koole et al., 2001). This two-item indicator of implicit self-esteem showed adequate internal consistency ($r = .28, p < .01$).

Narcissism. Narcissism was assessed with the Narcissistic Personality Inventory (Raskin & Hall, 1979; $\alpha = .82$).

Own Commitment. 1-item was used to assess participants' own commitment to the relationship. Participants indicated how committed they are to their current romantic relationship on a scale from 1 (not at all committed) to 7 (very committed).

Perceived Partner Commitment. 1-item was used to assess participants' perceptions of their partners' commitment to the relationship. Participants indicated how

committed they believed their partner is to their current romantic relationship on a scale from 1 (not at all committed) to 7 (very committed).

Own Love. The Love-Commitment scale was used to tap participants' feelings of love for the romantic partner using four adjectives: love, commitment, closeness, and emotional bondedness (Simpson et al., 1996). Participants responded to each adjective embedded in the question, "How much _____ do you feel toward your partner or your relationship?" on a 7-point scale (1 = very little or none; 7 = very much) both before the conflict interaction ($\alpha = .81$) and after the conflict interaction ($\alpha = .92$).

Perceived Partner Love. The Love-Commitment scale was also used to tap participant's perceptions of their partner's love for them. Participants responded to each of the four adjectives (i.e., love, commitment, closeness and emotional bondedness) embedded in the question, "How much _____ does your partner feel toward you or your relationship?" before the conflict interaction ($\alpha = .82$) and after the conflict interaction ($\alpha = .93$).

Relationship Satisfaction. A 4-item satisfaction scale was used to assess participant's global satisfaction with their relationship (adapted from Murray, Holmes, & Griffin, 1996a and DeHart, Murray, Pelham, Rose, 2003). These items included "I am extremely happy with my romantic relationship," "I have a very strong relationship with my romantic partner," "I do not feel that my romantic relationship is successful" (reverse coded), and "I am extremely satisfied with my romantic relationship." Participants responded to these items on a 9-point scale (1 = do not agree at all, 7 = agree completely) both before the conflict interaction ($\alpha = .78$) and after the conflict interaction ($\alpha = .83$).

Interpersonal Vulnerability. A 7-item measure was used to assess feelings of interpersonal vulnerability and rejection following the conflict interaction (adapted from Murray et al., 2008). Participants indicated how they felt directly following the interaction (happy, angry, hurt, betrayed, included, rejected, disappointed) on a 7-point scale (1 = not at all; 7 = very). Positive items were reverse scored such that higher scores reflect greater feelings of interpersonal angst or vulnerability ($\alpha = .93$).

Mood. The Positive and Negative Affectivity Schedule (PANAS; Watson, Clark, & Tellegen, 1988) was used to tap participants' mood directly following the conflict interaction. The PANAS consists of 10 negative (e.g., irritable, jittery) and 10 positive (e.g., excited, strong) emotions. Participants rated the extent that they felt each emotion at that moment on a 5-point scale (1 = very slightly or not at all, 5 = extremely). An index of positive affect was created by aggregating the positive emotions ($\alpha = .87$) and an index of negative affect was created by aggregating the negative emotions ($\alpha = .87$).

Coding Interactions

Videotapes were coded by trained observers. Before observers made any ratings, they were given detailed definitions, instructions, and training on each set of approach and avoidance verbal and nonverbal behaviors. To increase the independence of ratings and decrease comparisons between partners from the same dyad, half of the computer screen was covered so that trained observers could only see the member of the couple whose behavior they were coding. In addition, observers rating verbal behavior coded either the male participants or the female participants, but not both. Thus three independent observers coded male's approach and avoidance verbal behavior and three

coded female's approach and avoidance verbal behavior. Finally, three independent observers coded male's approach and avoidance nonverbal behavior and female's approach and avoidance nonverbal behavior. If members of a couple were of the same sex, independent observers were told to code either the participant on the right or the left.

Interrater Reliability

Because ratings of verbal and nonverbal approach and avoidance behaviors were continuous, interrater reliability was established by calculating intraclass correlations (ICC). Two ICCs, one for males and one for females, were computed for each behavior item being coded. There are three models of intraclass correlations and two types of computation (Shrout & Fleiss, 1979). The current study used a two way mixed model, where raters are seen as a fixed effect and behaviors are seen as a random effect. In this model, all raters of interest rate all behaviors of interest (e.g., three raters rate all male verbal behavior). A consistency computation was used to determine if raters' scores are correlated (as opposed to identical). Ratings by the three independent observers were averaged to create a single rating for each behavior being coded. Each of these averaged behavior ratings were then combined into their appropriate behavior category (i.e., positive approach verbal behaviors, negative approach verbal behaviors, positive avoidant verbal behaviors, etc.). An ICC score of .70 or higher is considered acceptable interrater reliability.

Approach Verbal Behaviors. Approach verbal behaviors were assessed by ratings on the 10-items adapted from the RMICS and used in Study 1 (Heyman & Vivian, 2000). On a scale ranging from 1 (not at all) to 7 (nearly all the time), verbal observers rated the

degree to which participants engaged in each of the 5 positive approach verbal behaviors (“expressed understanding for their partner’s view or behaviors,” $ICC_f = .80$, $ICC_m = .86$; “rephrased what their partner said in their own words,” $ICC_f = .77$, $ICC_m = .75$; “reassured partner of their feelings,” $ICC_f = .76$, $ICC_m = .78$; “put a positive spin on the conversation,” $ICC_f = .82$, $ICC_m = .83$; “expressed caring or concern for their partner or relationship,” $ICC_f = .76$, $ICC_m = .72$). The 5 positive approach verbal behaviors were combined such that higher scores indicated greater observed positive approach verbal behavior ($\alpha = .66$).

In addition, verbal observers rated the degree to which participants engaged in each of 6 negative approach verbal behaviors (“criticized their partner,” $ICC_f = .86$, $ICC_m = .81$; “complained about partner’s personality or character,” $ICC_f = .77$, $ICC_m = .75$; “insulted or name called,” $ICC_f = .86$, $ICC_m = .71$; “snapped or yelled,” $ICC_f = .90$, $ICC_m = .76$; “responded sarcastically,” $ICC_f = .80$, $ICC_m = .78$; “disagreed or disapproved,” $ICC_f = .81$, $ICC_m = .81$). The 6 negative approach verbal behaviors were combined such that higher scores indicated greater observed negative approach verbal behavior ($\alpha = .85$).

Avoidant Verbal Behaviors. Avoidant verbal behaviors were assessed by ratings on 10-items. The 5 positive avoidant verbal behaviors developed for Study 1 were modified slightly to make them applicable to the observational methodology of Study 2. On a scale ranging from 1 (not at all) to 7 (nearly all the time), verbal observers rated the degree to which participants engaged in each of the 5 positive avoidant verbal behaviors. However, because several of the behaviors were never (or rarely) observed, only two of the positive avoidant verbal behaviors are included in the study (“joked or used humor”

ICC_f = .82, ICC_m = .89; “drew attention to other positive aspects of the relationship” ICC_f = .74, ICC_m = .71). Because these two items failed to have good internal consistency, the items were not combined into a single index of positive avoidant verbal behaviors.

Similarly, only two of the 5 negative avoidant verbal behaviors adapted from the RMICS (Heyman & Vivian, 2000) were observed during the conflict discussions (“tried to or did change the subject” ICC_f = .79, ICC_m = .76; “brought up a completely unrelated topic (to avoid discussing the issue)” ICC_f = .77, ICC_m = .84). The remaining two negative avoidant verbal behaviors showed good internal consistency ($\alpha = .75$) and were combined such that higher scores indicated greater observed negative avoidant verbal behavior.

Approach Nonverbal Behaviors. Approach nonverbal behaviors were assessed by ratings on the 10-items adapted from the RMICS and used in Study 1 (Heyman & Vivian, 2000). On a scale ranging from 1 (not at all) to 7 (nearly all the time), nonverbal observers rated the degree to which participants engaged in each of the 5 positive approach nonverbal behaviors (“maintained eye contact with their partner,” ICC_f = .84, ICC_m = .87; “moved or leaned closer to their partner,” ICC_f = .85, ICC_m = .85; “affectionately touched partner,” ICC_f = .98, ICC_m = .97; “smiled at partner, laughed,” ICC_f = .86, ICC_m = .86; “nonverbal agreement,” ICC_f = .87, ICC_m = .87). The 5 positive approach nonverbal behaviors were combined such that higher scores indicated greater observed positive approach nonverbal behaviors ($\alpha = .60$).

In addition, nonverbal observers rated the degree to which participants engaged in each of the 5 negative approach nonverbal behaviors (“rolled eyes,” ICC_f = .77, ICC_m =

.78; “nonverbal disagreement,” $ICC_f = .75$, $ICC_m = .79$; “cross or sour facial expression,” $ICC_f = .80$, $ICC_m = .85$; “sighed out of frustration or annoyance,” $ICC_f = .83$, $ICC_m = .80$; “used a negative or angry tone of voice,” $ICC_f = .81$, $ICC_m = .89$). The 5 negative approach nonverbal behaviors were combined such that higher scores indicated greater observed negative approach nonverbal behaviors ($\alpha = .80$).

Avoidant Nonverbal Behaviors. Avoidant nonverbal behaviors were assessed by ratings on 10-items. The 5 positive avoidant nonverbal behaviors developed for Study 1 were modified slightly to make them applicable to the observational methodology of Study 2. On a scale ranging from 1 (not at all) to 7 (nearly all the time), nonverbal observers rated the degree to which participants engaged in each of the 5 positive avoidant nonverbal behaviors (“shifted or turned away from partner in order to calm down,” $ICC_f = .68$, $ICC_m = .74$; “refrained from talking to avoid saying something negative,” $ICC_f = .54$, $ICC_m = .68$; “controlled negative body movements,” $ICC_f = .42$, $ICC_m = .63$; “stopped talking to gather their thoughts,” $ICC_f = .53$, $ICC_m = .60$; “engaged in playful movements or nonverbal humor,” $ICC_f = .83$, $ICC_m = .87$). Several of the positive avoidant nonverbal behaviors did not meet the criterion for acceptable interrater reliability; therefore, “refrained from talking,” “controlled negative movements,” and “stopped talking to gather thoughts” were dropped from the measure. The remaining two items, “shifted to calm down” and “nonverbal humor,” did not show acceptable internal consistency, and thus were not combined into a single index of positive avoidant nonverbal behavior.

Nonverbal observers also rated the degree to which participants engaged in each of the 5 negative avoidant nonverbal behaviors adapted from the RMICS (Heyman & Vivian, 2000; “closed off body language,” $ICC_f = .86$, $ICC_m = .92$; “moved away or reduced physical closeness with partner,” $ICC_f = .72$, $ICC_m = .75$; “reduced eye contact,” $ICC_f = .84$, $ICC_m = .84$; “stopped talking or responding to partner,” $ICC_f = .88$, $ICC_m = .80$; “appeared tense or rigid,” $ICC_f = .70$, $ICC_m = .72$). However, the 5-item indicator of negative avoidant nonverbal behavior did not show acceptable internal consistency; therefore, “closed off body language” and “reduced physical closeness” were dropped from the measure. The remaining 3 items (“reduced eye contact,” “stopped talking,” and “appeared tense or rigid”) had good internal consistency ($\alpha = .66$).

Study 2: Results

Multilevel Regression Analyses

Table 7 presents the descriptive statistics and correlations for the background variables and observer-rated behaviors from the conflict discussion. Because the data contains two levels of analysis with individuals (Level 1) nested within couple (Level 2), I used PROC MIXED within SAS v9.1.3 (SAS Institute, 2002) to conduct multilevel regression analyses (Kenny, Bolger, & Kashy, 1998; Nezlek, 2001). This approach allows for the simultaneous estimation of regression equations for partners from the same dyad, while controlling for the interdependence between observations. Therefore, in my analyses I was able to use data from both members of a dyad in the same way.

Table 7. Descriptive Statistics and Correlations.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Gender			—														
2. Explicit Self-esteem	5.76	.92	-.07	—													
3. Implicit Self-esteem	1.86	1.58	-.02	.14	—												
4. Narcissism	20.90	6.32	-.07	.20**	.05	—											
5. Perceived Partner Commitment	6.56	.83	.05	.02	.17*	-.08	—										
6. Verbal Positive Approach	2.04	.53	.22**	.01	-.08	-.11	.12 [†]	—									
7. Verbal Negative Approach	1.61	.61	.09	.01	.12	.28**	-.21**	-.44**	—								
8. Verbal Humor	2.36	1.01	-.23**	.01	.13 [†]	-.09	.18*	.07	-.06	—							
9. Positive Aspects	1.69	.65	-.18**	.05	.07	-.06	.12 [†]	.47**	-.33**	.32**	—						
10. Verbal Negative Avoid	1.85	.78	.08	-.02	-.02	-.04	.31 [†]	-.04	-.03	.47**	.27**	—					
11. Nonverbal Positive Approach	2.80	.64	.20**	.07	.03	-.08	.16*	.41**	-.11	.36**	.23**	.20**	—				
12. Nonverbal Negative Approach	2.07	.68	.00	.02	-.01	.23**	-.19**	-.41**	.69**	-.23**	-.30**	-.11	-.37**	—			
13. Nonverbal Humor	1.61	.76	.04	-.01	.13 [†]	-.05	.13	.10	-.02	.55**	.22**	.33**	.45**	-.19*	—		
14. Shifted to Calm Down	1.78	.58	.18*	-.11	-.02	-.04	-.07	-.06	.26**	-.07	-.11	.06	-.03	.26**	-.04	—	
15. Nonverbal Negative Avoid	2.60	.71	-.18**	-.03	-.04	.04	-.11	-.35**	-.05	-.32**	-.25**	-.20**	-.74**	.18**	-.36**	-.03	—

Note. *N* = 204. [†] *p* < .10* *p* < .05. ** *p* < .01

Three types of predictor variables have been identified in dyadic research: between-dyad, within-dyad and mixed variables (Kenny, 1996). *Between-dyad variables* are those that do not vary within dyad, but vary between dyads from the sample, such as relationship length. *Within-dyad variables* are those that vary within dyad, but average to the same value across dyads, such as gender. Finally, *mixed variables* are those predictor variables that have variation both within and between dyads, such as explicit and implicit self-esteem. Between-dyad variables will always be modeled as Level-2 predictors because variation only occurs across dyads. Within-dyad variables will always be modeled as Level-1 predictors because variation only occurs within dyads. Mixed predictor variables can be modeled as either Level-1 or Level-2 predictors because variation occurs both within and between dyads. In the current study, mixed predictor variables (i.e. implicit self-esteem, explicit self-esteem, narcissism) will be modeled as Level-1 variables (Campbell & Kashy, 2002).

Multilevel regression analyses were used to examine the main effects of explicit self esteem (Hypothesis 1), implicit self-esteem (Hypothesis 2) and the interaction between explicit and implicit self-esteem (Hypothesis 3a) predicting each of the behavioral dependent variables. For example, positive approach verbal behaviors were predicted from the following Equation 1:

$$\text{Positive approach verbal}_{ij} = \gamma_{00} + \gamma_{10}(\text{gender}) + \gamma_{20}(\text{mood}) + \gamma_{30}(\text{negative approach verbal}) + \gamma_{40}(\text{explicit self-esteem}) + \gamma_{50}(\text{implicit self-esteem}) + \gamma_{60}(\text{explicit self-esteem} \times \text{implicit self-esteem}) + u_{0j} + u_{1j} + r_{ij}.$$

Where Positive approach verbal_{ij} refers to the observed positive approach verbal behaviors for participant *i* from couple *j*, and γ_{00} refers to the average positive approach verbal behaviors observed across couples (adjusted for other predictors in the model). The terms γ_{10} and γ_{20} represent the effect of gender (Level-1 within-dyad variable) and mood (Level-1 mixed variable) on participant *i*'s positive approach verbal behaviors respectively. In addition, the term γ_{30} represents participant *i*'s observed negative approach verbal behavior (Level-1 mixed variable) on participant *i*'s positive approach verbal behaviors. The term γ_{40} represents the effect of explicit self-esteem (Level-1 mixed variable) on participant *i*'s positive approach verbal behaviors. The term γ_{50} represents the effects of implicit self-esteem (Level-1 mixed variable) on participant *i*'s positive approach verbal behaviors. All Level-1 continuous mixed variables were centered around the grand mean. The term γ_{60} represents the coefficient for the Explicit Self-esteem X Implicit Self-esteem Level-1 mixed variable interaction. The interaction term was calculated by grand mean centering both explicit and implicit self-esteem in advance and then multiplying them together.⁷

Self-esteem and Observer-rated Verbal Behaviors

Approach Verbal Behaviors

Is explicit self-esteem positively related to people's positive and negative approach verbal behaviors during a threatening interaction with their partner? To test this hypothesis, I first ran a multilevel regression analysis on the observed positive approach verbal behaviors. I also examined whether the main effect of explicit self-esteem would be qualified by a two-way interaction between explicit self-esteem and implicit self-

⁷ Neither gender nor mood moderated any of the effects that are reported.

esteem. The multilevel regression analyses revealed a significant main effect of gender ($b = .14, p < .01$) indicating that females engaged in more positive approach verbal behaviors during the interaction than did males, and a significant main effect of negative approach verbal behaviors ($b = -.34, p < .01$). However, this analysis failed to reveal significant main effects for explicit self-esteem ($b = .02, p = .63$), implicit self-esteem ($b = -.01, p = .53$), and the interaction between implicit and explicit self-esteem ($b = .01, p = .79$). Similarly, the multilevel regression analyses on negative approach verbal behaviors also failed to reveal significant main effects of explicit self-esteem ($b = -.001, p = .95$), implicit self-esteem ($b = .02, p = .40$), and the interaction between implicit and explicit self-esteem ($b = -.03, p = .13$).

Avoidant Verbal Behaviors

As you recall, the positive avoidant behaviors were difficult to observe, and I was only able to retain 2 behaviors for analysis: *drawing attention to other positive aspects of the relationship* and *verbal humor*. Because these two positive avoidant verbal components could not reliably be combined, I looked at them separately. The multilevel regression analyses on attention to positive aspects revealed main effects for gender, mood, and negative avoidant verbal behaviors, but failed to reveal main effects for self-esteem. The interaction between implicit and explicit self-esteem was also not significant (see left side of Table 8). The regression analysis on verbal humor showed significant main effects for gender, mood, and negative avoidant nonverbal behaviors. In addition, there was a marginally significant and positive main effect of implicit self-esteem (see middle of Table 8).

Table 8. Multilevel Regression Results for Explicit Self-esteem and Implicit Self-esteem predicting Avoidant Verbal Behaviors

	<u>Avoidant Verbal Behaviors</u>					
	Positive Aspects (DV)		Verbal Humor (DV)		Negative (DV)	
	<u>b</u>	<u>SE</u>	<u>b</u>	<u>SE</u>	<u>b</u>	<u>SE</u>
Intercept	1.69 **	.05	2.37 **	.07	1.84**	.07
Gender	-.12**	.03	-.28**	.05	.04	.03
Mood	.18**	.07	.26*	.10	.20*	.08
Negative Avoidant Verbal	.16**	.06	.62**	.09	--	--
Positive Verbal	--	--	--	--	.21 [†]	.11
Explicit Self-esteem	.004	.04	-.04	.07	-.09*	.05
Implicit Self-esteem	.01	.02	.07 [†]	.04	-.01	.03
Explicit Self-esteem X Implicit Self-esteem	.02	.03	.02	.04	.02	.03

Note. [†] $p < .10$ * $p < .05$ ** $p < .01$

Next, a regression analysis was run on the measure of avoidant negative verbal behaviors. As shown in the right side of Table 8, the multiple regression analyses revealed a main effect for mood. Moreover, explicit self-esteem was significantly and negatively related to observed negative avoidant verbal behaviors. Consistent with Study 1, the current findings indicate that, during romantic relationship conflict, participants low (vs. high) in explicit self-esteem engaged in significantly more negative avoidant verbal behaviors (e.g., changed or avoided subject). These results provide partial support for Hypothesis 1, and suggest that people low in explicit self-esteem reduce closeness with their romantic partner during conflict by engaging in more negative avoidant verbal behaviors.

Self-esteem and Observer-rated Nonverbal Behaviors

Approach Nonverbal Behaviors

To determine if people's self-esteem influences their positive and negative approach nonverbal behaviors during conflict, an initial multilevel regression analysis was run on the observed positive approach nonverbal behaviors. Analyses revealed significant main effects for gender ($b = .14, p < .01$), mood ($b = .25, p < .01$), and negative approach nonverbal behavior ($b = -.30, p < .01$). However, there were no significant main effects for explicit self-esteem ($b = .02, p = .61$), implicit self-esteem ($b = .01, p = .61$), or the interaction between implicit and explicit self-esteem ($b = -.0003, p = .99$).

An additional multilevel regression analysis was run on the measure of negative approach nonverbal behaviors. However, the predicted main effects of explicit self-

esteem ($\underline{b} = .05$, $\underline{p} = .27$), implicit self-esteem ($\underline{b} = -.003$, $\underline{p} = .94$), and the interaction term were not significant ($\underline{b} = -.03$, $\underline{p} = .23$).

Avoidant Nonverbal Behaviors

As you recall, several of the positive avoidant nonverbal behaviors did not meet the criterion for acceptable interrater reliability. The two items with acceptable interrater reliability, *shifted to calm down* and *nonverbal humor* could not be reliably combined. Therefore, separate regression analyses were run on each of these two positive avoidant verbal behaviors. The multilevel regression analysis on shifting to calm down revealed a main effect for gender ($\underline{b} = .10$, $\underline{p} < .05$), but failed to reveal main effects for implicit ($\underline{b} = .001$, $\underline{p} = .96$) and explicit self-esteem ($\underline{b} = -.05$, $\underline{p} = .32$). The interaction between implicit and explicit self-esteem was also not significant ($\underline{b} = -.02$, $\underline{p} = .58$). Similarly, the multilevel regression analysis on nonverbal humor failed to reveal the main effects of implicit self-esteem ($\underline{b} = .04$, $\underline{p} = .20$) and explicit self-esteem ($\underline{b} = -.04$, $\underline{p} = .50$) and their interaction ($\underline{b} = .02$, $\underline{p} = .48$).

Finally, an additional multilevel regression analysis was run on the measure of negative avoidant nonverbal behaviors. This analysis revealed main effects for mood ($\underline{b} = -.12$, $\underline{p} < .05$) and positive nonverbal behaviors ($\underline{b} = -.89$, $\underline{p} < .01$). However, there were no significant main effects of implicit self-esteem ($\underline{b} = -.01$, $\underline{p} = .82$) or explicit self-esteem ($\underline{b} = .02$, $\underline{p} = .68$), and a non-significant interaction term ($\underline{b} = -.03$, $\underline{p} = .27$).

*Self-esteem, Partner Commitment, and Observer-rated Behaviors**Follow-up Analyses*

Because preliminary analyses in Study 1 revealed that perceptions of partner commitment might influence whether implicit self-esteem activates risk regulation dynamics, I wanted to explore whether perceptions of a partner's commitment moderated the relationship between implicit self-esteem and observer-rated verbal and nonverbal behaviors during conflict. Consistent with Study 1, perceived partner commitment did not moderate the relation between implicit self-esteem and any of the negative approach and avoidance verbal and nonverbal behaviors. Unlike Study 1, perceptions of partner commitment did not moderate the relation between implicit self-esteem and any of the positive approach and positive avoidant verbal behaviors. However, consistent with Study 1, perceived partner commitment did moderate the relation between implicit self-esteem and positive approach nonverbal behaviors (as discussed in the section below).

Positive Approach Nonverbal Behaviors

As shown in Table 9, a multilevel regression analysis on positive approach nonverbal behaviors (e.g., maintaining eye contact, leaning closer to partner) revealed significant main effects for gender, mood, and negative nonverbal behaviors, as well as a significant 2-way Implicit Self-esteem X Partner Commitment interaction.

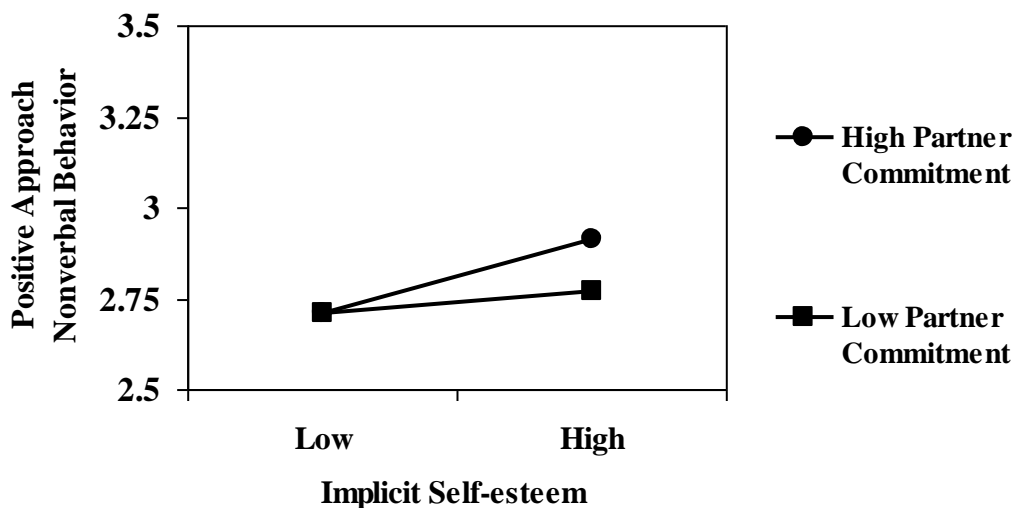
Table 9. Multilevel Regression Results for Implicit Self-esteem and Partner Commitment predicting Positive Approach Nonverbal Behaviors.

	Positive Approach Nonverbal (DV)	
	<u>b</u>	<u>SE</u>
Intercept	2.78**	.05
Gender	.14**	.03
Mood	.27**	.06
Negative Approach Nonverbal	-.29**	.06
Partner Commitment	.04	.05
Implicit Self-esteem	.02	.02
Implicit Self-esteem X Partner Commitment	.05*	.03

Note. † $p < .10$. * $p < .05$. ** $p < .01$.

As illustrated by the regression lines depicted in Figure 7, the simple slope tests revealed that implicit self esteem was positively related to positive approach nonverbal behaviors when partner commitment was high ($b = .06$, $p = .08$), but not when partner commitment was low ($b = -.02$, $p = .39$). In line with the results of Study 1, the current findings suggest that implicit self-esteem influences positive approach nonverbal behavior in ways consistent with risk regulation dynamics, but only when participants perceived their partner was committed to the relationship. These results provide partial support for Hypothesis 2.

Figure 7. Predicting positive nonverbal behaviors from the interaction between implicit self-esteem and perceived partner commitment.



Narcissism and Observer-rated Verbal Behaviors

In Study 1, people high in narcissism reported engaging in fewer negative approach verbal behaviors during a negative interaction with their romantic partner. Presumably a self-enhancement strategy, narcissists were able to affirm the self in response to threat by reporting fewer negative verbal behaviors during relationship conflict. In Study 2, I wanted to explore whether these findings would generalize to observer-rated behaviors in a threatening romantic relationship interaction. That is, do narcissists truly engage fewer negative approach verbal behaviors during conflict?

Negative Approach Verbal Behaviors

To test this idea I ran a multilevel regression analysis predicting negative approach verbal behaviors from the main effects of gender, mood, positive verbal behaviors and narcissism (see left side of Table 10). These analyses revealed a

significant main effect of gender and positive verbal behaviors. In addition, there was a significant main effect of narcissism. In contrast to Study 1, the current study revealed that narcissism was significantly and positively related to negative approach verbal behaviors. Therefore, though people high in narcissism reported behaving less verbally negative in Study 1, when behaviors were rated by independent observers, they actually engaged in significantly more negative approach verbal behaviors (e.g., criticizing, name-calling).

Negative Avoidant Verbal Behaviors

I ran an additional regression analysis predicting negative avoidant verbal behaviors from the main effects of gender, mood, positive verbal behaviors and narcissism. As shown in the right side of Table 10, this analysis revealed that narcissism was negatively related to negative avoidant behaviors, suggesting that narcissists are less likely to avoid talking about the conflict. Together, these results imply that not only are narcissists more likely to verbally approach their partner with negativity, but they are also less likely to avoid engaging in the conflict discussion. Narcissism did not predict any of the nonverbal approach or avoidant behaviors.⁸

⁸ Analyses with narcissism were first run controlling for explicit self-esteem, implicit self-esteem and the interaction between explicit and implicit self-esteem. Controlling for these main effects and interaction did not change any of the results presented here.

Table 10. Multilevel Regression Analyses for Narcissism predicting Negative Verbal Behaviors.

	<u>Negative Verbal Behaviors</u>			
	Approach (DV)		Avoidant (DV)	
	<u>b</u>	<u>SE</u>	<u>b</u>	<u>SE</u>
Intercept	1.62**	.05	1.85**	.07
Gender	.07**	.03	.05	.03
Mood	-.003	.06	.14 [†]	.08
Positive Verbal	-.43**	.08	.17	.11
Narcissism	.01*	.005	-.01*	.007

Note. [†] $p < .10$ * $p < .05$ ** $p < .01$

Post-Conflict Measures

Self-esteem and Post-conflict Measures

Previous research suggests that, in response to relationship-threat, self-esteem influences perceptions of the relationship and feelings of rejection (e.g., Murray et al., 2002). In the current study, participants were asked to report on their own love and relationship satisfaction, perceived partner love, feelings of rejection, and affect following the conflict discussion. To determine if self-esteem influences these post-conflict relationship perceptions and feelings of rejection, I ran several multilevel regression analyses predicting the post-conflict measures from the main effects of gender, implicit self-esteem, explicit self-esteem and the interaction between implicit and explicit self-esteem. These analyses also controlled for the relevant pre-conflict relationship perception. For example, analyses predicting post-conflict reports of love for the partner controlled for pre-conflict reports of love.

An initial multilevel regression analysis predicting the post-conflict measure of participant's own love for their romantic partner failed to produce significant effects for implicit or explicit self-esteem, or the interaction between implicit and explicit self-esteem. Because the post-conflict measure of participant's own love was a composite measure consisting of ratings on four adjectives (i.e., closeness, love, commitment, and emotional bondedness to the partner), I decided to look at the component adjectives separately. Only the analysis predicting post-conflict closeness revealed a significant pattern of results. Specifically, the multilevel regression analysis on post-conflict feelings of closeness with the romantic partner revealed a non-significant main effect of gender ($b = .06, p = .29$), and significant main effects for pre-conflict feelings of closeness ($b = .44, p < .01$), explicit self-esteem ($b = .15, p < .05$), and implicit self-esteem ($b = .13, p < .05$). The 2-way Implicit Self-esteem X Explicit Self-esteem interaction was not significant ($b = -.04, p = .35$). These results suggest that people high (vs. low) in explicit self-esteem and high (vs. low) in implicit self-esteem reported increased closeness with their romantic partner following the conflict discussion.

Multilevel analyses predicting post-conflict relationship satisfaction revealed a non-significant main effect of gender ($b = -.03, p = .57$), but significant main effects of pre-conflict satisfaction ($b = .67, p < .001$) and explicit self-esteem ($b = .19, p < .05$). However, neither the main effect of implicit self-esteem ($b = .01, p = .81$) nor the 2-way Explicit Self-esteem X Implicit Self-esteem interaction ($b = .03, p = .61$) were significant. Similarly, multilevel analyses predicting post-conflict perceptions of the partner's love revealed a non-significant main effect of gender ($b = -.04, p = .44$), but significant main

effects for pre-conflict perceptions of love ($b = .76, p < .001$) and explicit self-esteem ($b = .15, p < .05$); however, neither implicit self-esteem ($b = .02, p = .54$) nor the interaction between implicit and explicit self-esteem ($b = -.03, p = .43$) predicted post-conflict perceptions of partner love. These results suggest that, following relationship conflict, participants high in explicit self-esteem reported more satisfaction with their relationship and more confidence in their partner's love, while participants low in explicit self-esteem appeared less sure of their partner's affections. However, implicit self-esteem was unrelated to post-conflict satisfaction and perceived partner love.

An additional multi-level analysis was run predicting post-conflict interpersonal vulnerability and rejection. This analysis revealed a marginally significant main effect of gender ($b = .08, p = .07$), indicating women felt somewhat more rejected following the interaction. This analysis also revealed that explicit self-esteem was significantly and negatively related to feelings of interpersonal vulnerability ($b = -.24, p < .001$), indicating that participants low in explicit self-esteem felt more rejected after the conflict discussion than did their high self-esteem counterparts. Neither implicit self-esteem ($b = -.03, p = .36$), nor the interaction between implicit and explicit self-esteem ($b = .02, p = .64$) significantly predicted post-conflict feelings of rejection.

Finally, a multilevel regression analysis was run predicting post-conflict negative affect. This analysis revealed a non-significant main effect of gender ($b = .05, p = .16$), and significant main effects for positive affect ($b = -.29, p < .001$) and explicit self-esteem ($b = -.18, p < .001$), indicating that people low in explicit self-esteem experienced more negative affect following the conflict discussion compared to participants with high

explicit self-esteem. Again, both the main effect of implicit self-esteem ($b = .02, p = .51$) and the interaction between implicit and explicit self-esteem ($b = .001, p = .96$) were not significant when predicting post-conflict negative affect.⁹

Narcissism and Post-conflict Measures

I wanted to explore whether the negative approach verbal behaviors displayed by narcissists during the conflict would spill over into their post-conflict ratings of their relationship. To do this, I ran several multilevel regression analyses predicting the post-conflict measures from the main effects of gender, the relevant pre-conflict relationship perception, and narcissism.¹⁰

First, I ran a multilevel regression analysis predicting the post-conflict composite measure of participants' own love. This analysis failed to reveal significant main effects for narcissism, so I explored the component adjectives of the measure separately.

Though narcissism did not significantly predict love, closeness or emotional bondedness, it did significantly predict post-conflict commitment. Specifically, the regression analysis revealed a non-significant main effect of gender ($b = .07, p = .16$) and significant main effects of pre-conflict commitment ($b = .90, p < .001$) and narcissism ($b = -.02, p < .05$). These findings suggest that participants high in narcissism reduced commitment to their romantic partner following the conflict interaction.

⁹ Perceived partner commitment did not moderate the relation between implicit self-esteem and the post-conflict measures presented here.

¹⁰ Again, analyses for narcissism were also run controlling for the main effects of explicit and implicit self-esteem and the interaction between implicit and explicit self-esteem. Controlling for these main effects and interaction did not change the pattern of results presented here.

In addition, though narcissism did not significantly predict post-conflict relationship satisfaction ($b = -.02, p = .16$), perceptions of partner love ($b = .01, p = .38$) or post-conflict feelings of vulnerability ($b = .01, p = .31$), it did predict post-conflict negative affect. Specifically, the analysis predicting post-conflict negative affect revealed a non-significant main effect of gender ($b = .06, p = .14$), and significant main effects of positive affect ($b = -.37, p < .001$) and narcissism ($b = .03, p < .001$). These results suggest that participants high in narcissism responded to romantic relationship conflict by not only behaving more negatively during the conflict, but also becoming less committed to their partner and experiencing more negative affect following the conflict.

Study 2: Discussion

Study 2 used an observational methodology to explore whether explicit self-esteem, implicit self-esteem, and their interaction predicted observer-rated approach and avoidance verbal and nonverbal behaviors during romantic relationship conflict. I failed to find the hypothesized effect of explicit self-esteem on ratings of positive approach verbal, negative approach verbal and positive avoidant verbal behaviors in Study 2. However, I did find the hypothesized pattern of results predicting negative avoidant verbal behaviors (e.g., changing or avoiding the subject). Specifically, participants low (vs. high) in explicit self-esteem engaged in more negative avoidant verbal behavior during the conflict interaction, suggesting that one way people low in explicit self-esteem self-protect under relationship threat is by avoiding the conflict discussion. These findings provide partial support for the notion that participants low in explicit self-esteem will engage in more negative verbal behaviors (Hypothesis 1).

Though I did not find support for the hypothesized main effect of implicit self-esteem on positive and negative approach and avoidance nonverbal behaviors (Hypothesis 2), the results of Study 2 did reveal that perceived partner commitment moderated the relation between implicit self-esteem and risk regulation dynamics during the conflict discussion. Specifically, implicit self-esteem was positively related to positive approach nonverbal behaviors (e.g., smiling, touching partner, maintaining eye contact) during the conflict when perceptions of partner commitment were high, but not when perceptions of partner commitment were low.

Study 2 failed to produce the hypothesized interaction between implicit and explicit self-esteem predicting negative approach verbal and nonverbal behaviors (Hypothesis 3a). However, Study 2 did reveal that narcissism predicted negative approach (e.g., criticizing, name-calling) and avoidant (e.g., changing or avoiding the subject) verbal behaviors during the conflict discussion. In support of Hypothesis 3b, Participants higher (vs. lower) in narcissism displayed more negative approach verbal behaviors during the conflict interaction. Moreover, participants higher (vs. lower) in narcissism engaged in less negative avoidant verbal behaviors, suggesting that narcissists are both more likely to verbally attack their partner during conflict, and less likely to verbally avoid the conflict.

Analyses predicting post-conflict feelings and relationship perceptions revealed that both explicit and implicit self-esteem were positively and independently related to post-conflict reports of relationship closeness. However, only explicit self-esteem was positively related to post-conflict relationship satisfaction and post-conflict perceptions of

partner's love. These findings existed above and beyond participant's pre-conflict feelings of satisfaction and perceived partner love, suggesting that while participant's high in explicit self-esteem enhanced their relationship in response to the conflict discussion, participants low in explicit self-esteem doubted their partner's love and affection. In addition, only explicit self-esteem was negatively related to post-conflict negative affect and feelings of interpersonal vulnerability. These findings indicate that people low in explicit self-esteem were not only in a worse mood following the conflict, but were also more hurt by the conflict interaction than their high explicit self-esteem counterparts.

Study 2 also revealed that people high in narcissism reported less post-conflict commitment to their partner and more negative affect than people low in narcissism. The results for post-conflict commitment held above and beyond narcissists pre-conflict ratings of commitment, indicating that narcissists may have derogated their romantic relationships in an effort to feel better about themselves after the conflict.

CHAPTER SIX

GENERAL DISCUSSION

Studies 1 and 2 highlighted the importance of both explicit and implicit self-esteem for predicting responses to relationship threat, revealing a pattern of results consistent with the risk regulation model (Murray et al., 2008). In addition, both studies revealed the value of understanding how perceptions of partner commitment moderate the relation between implicit self-esteem and risk regulation dynamics. These studies also emphasize the importance of exploring the role of narcissism independent of the interaction between implicit and explicit self-esteem when predicting responses to relationship-threat.

Explicit Self-esteem

The results for explicit self-esteem and responses to relationship threat indicated that explicit self-esteem was negatively related to self-reported negative avoidant verbal behaviors (Study 1) and observer-rated negative avoidant verbal behaviors (Study 2) in a threatening romantic relationship interaction. Because people low (vs. high) in explicit self-esteem find it difficult to trust in their partner's continued love and acceptance, they respond to the risk of rejection in their romantic relationships by prioritizing self-protection goals (Murray et al., 2006; 2008). Importantly, self-protection goals motivate people low in self-esteem to avoid negative and hurtful experiences (Murray et al., 2008).

Results from both of the current studies suggest that one way people low in explicit self-esteem try to evade hurt during romantic relationship conflict is by actively avoiding conflict discussions.

The self-protective behaviors displayed by people low in explicit self-esteem during the conflict interaction in Study 2 translated into their post-conflict perceptions of the relationship. That is, people low in explicit self-esteem reported decreased closeness and satisfaction in their romantic relationship and less confidence in their partner's love. On the other hand, people high in explicit self-esteem were able to pursue connectedness goals by both drawing closer to their partner and enhancing their romantic relationship (e.g., Murray et al., 2008). Consistent with these findings, research on the risk regulation model has similarly revealed that, following relationship-threat, people low in explicit self-esteem report less closeness and confidence in their partner's acceptance, while people high in explicit self-esteem feel more sure of their partner's regard (Murray et al., 2002; Murray, Bellavia, et al., 2003).

Interestingly, the post-conflict analyses in Study 2 also revealed that people with low explicit self-esteem do not decrease love or commitment to their romantic partners after the conflict. These findings suggest that though people low in explicit self-esteem report loving their partners post-conflict, they still self-protectively regulate closeness within their relationship. Unfortunately, these self-protective behaviors fail to reduce the pain and severity of rejection experienced directly following romantic relationship conflict: participants low (vs. high) in explicit self-esteem reported more interpersonal vulnerability and negative affect following the conflict interaction. These findings are

similar to previous research demonstrating that people low in explicit self-esteem are more reactive than their high explicit self-esteem counterparts to episodes of perceived rejection (Murray et al., 2002).

Implicit Self-esteem

I failed to find the interaction between implicit self-esteem and relationship-threat condition predicting self-reported behaviors (Study 1) and the main effect of implicit self-esteem on observer-rated behaviors (Study 2). However, both preliminary analyses in Study 1 and multilevel analyses in Study 2 suggest that perceived partner commitment is an important moderator of the relation between implicit self-esteem and risk regulation dynamics. That is, when participants perceived their romantic partners as more committed to the relationship, those high (vs. low) in implicit self-esteem met needs for connection by not only reporting more positive verbal and nonverbal behaviors in a previous interaction (Study 1), but also displaying more positive approach nonverbal behaviors during a videotaped conflict interaction (Study 2). However, when perceptions of partner commitment were low, people high and low in implicit self-esteem did not differ in the types of behaviors they reported engaging in (Study 1), or were observed engaging in (Study 2), during a potentially rejecting romantic relationship interaction.

Though these results suggest perceived partner commitment moderates the relation between implicit self-esteem and risk regulation processes, neither the current study nor previous research (e.g., Murray et al., 2006; 2008; Murray et al., 2002) has reported that partner commitment influences the relation between *explicit* self-esteem and risk regulation processes. Why might partner commitment be an important moderator of

the relation between implicit self-esteem and risk regulation dynamics, but not moderate the relation between explicit self-esteem and risk regulation dynamics?

One potential explanation is that implicit (as compared to explicit) self-esteem is more sensitive to information about a partner's commitment. For example, researchers exploring implicit risk regulation have proposed that implicit beliefs may be more sensitive to cues of closeness in a relationship than explicit beliefs (e.g., DeHart et al., 2004), suggesting that implicit beliefs may also be more sensitive to cues of commitment. It seems possible that perceptions of a partner's commitment influence implicit processes to determine whether the activation of a regulatory system is necessary. That is, when partner commitment is high, implicit self-esteem likely influences risk regulation processes because the threat of rejection is more risky (and more painful). Conversely, when partner commitment is low, implicit self-esteem may not activate the risk regulation system because the threat of rejection is not as interpersonally painful when participants already believe their romantic partner is less invested in the relationship.

In line with this reasoning, research on attachment and commitment has similarly revealed that securely attached (i.e., high implicit self-esteem) men have more positive appraisals of their romantic partner than anxiously attached (i.e., low implicit self-esteem) men at high levels of commitment, but not at low levels of commitment (Young & Acitelli, 1998). The possibility that unconscious beliefs about the self are more sensitive to perceptions of commitment when regulating relationship dynamics is important because it suggests that, though explicit and implicit self-esteem influence risk regulation dynamics, the conditions under which explicit or implicit self-esteem will

exert their influence on regulation processes are very different. While explicit self-esteem may cue anyone in a relationship to engage in relationship regulation behaviors in response to threat (e.g., Murray et al., 2006; 2008), the effect of implicit self-esteem on the activation of risk regulation processes may be specific to certain relational contexts.

Moreover, Studies 1 and 2 consistently revealed that explicit and implicit self-esteem regulate different types of behaviors, with explicit self-esteem predicting negative avoidant behaviors and implicit self-esteem predicting positive behaviors. From an approach-avoidance framework, these results suggest that explicit and implicit self-esteem may orient people toward different social goals (e.g., Gable, 2006; Eliot, Gable, & Maples; 2006). For example, explicit self-esteem may function as an interpersonal sociometer cued toward the avoidance of negative social outcomes (e.g., Leary et al., 1995). As a result, people low in explicit self-esteem self-protect by engaging in negative avoidant behaviors that orient them away from conflict or rejection. Conversely, the implicit sociometer may be more proactive, geared toward the attainment of approach social goals (Gable, 2006). Thus people higher in implicit self-esteem are motivated to engage in positive behaviors, which orient them toward intimacy in the face of rejection.

Alternatively, some researchers have argued that implicit and explicit attitudes toward the self are not independent of one another (Gawronski & Bodenhausen, 2006), and that implicit self-esteem comes online first, while explicit self-esteem comes online as a corrective process (e.g., Olson, Fazio, & Hermann, 2007). Similarly, Murray and colleagues suggest that interpersonal risk automatically activates connectedness goals, which may be followed by a control system that activates self-protection goals (Murray et

al, 2006; 2008). Because both implicit self-esteem and connectedness goals occur automatically, implicit self-esteem may predict whether people engage in positive behaviors that meet needs for connection. On the other hand, explicit self-esteem may be influencing the secondary control system and negative behaviors aimed at self-protection. Future research is needed to determine whether the influence of implicit (vs. explicit) self-esteem is indeed more visible in the regulation of positive (vs. negative) behaviors and the underlying processes responsible for this effect.

Though Study 1 revealed that implicit self-esteem influences reports of positive verbal as well as nonverbal behavior exhibited during a threatening interaction with a romantic partner, Study 2 found that implicit self-esteem only influenced observer-rated positive approach nonverbal behavior. Because implicit self-esteem can, at times, be consciously experienced (e.g., Jordan et al., 2003; Jordan, Whitfield, & Zeigler-Hill, 2007), participants may have become aware of implicit desires for connection, motivating people high in implicit self-esteem to remember behaving positively (whether through verbal or nonverbal channels). However, when observing actual behavior, the moderating role of partner commitment on implicit processes only appeared to impact nonverbal behavior. These later findings are consistent with previous theory and research suggesting that implicit self-esteem should predict more automatic and uncontrolled responses, such as nonverbal behavior, both in general (Pelham & Hetts, 1999) and under threat (Spalding and Hardin, 1999).

Finally, post-conflict analyses revealed that people with high (vs. low) implicit self-esteem increased closeness with their romantic partner following the conflict

interaction. Implicit self-esteem did not predict any of the other post-conflict measures, suggesting people high in implicit self-esteem maintain feelings of love and satisfaction while regulating closeness in their relationship to meet connectedness goals. These findings are consistent with observational research on attachment style, which has revealed a similar pattern of results for attachment security and post-conflict perceptions of relationship closeness (Simpson et al., 1996; Simpson, Ickes, & Grich, 1999). Interestingly, the relationship between implicit self-esteem and post-conflict feelings of closeness was not moderated by perceptions of a partner's commitment, suggesting that the moderating role of partner commitment may be specific to the regulation of conflict behavior (vs. perceptions of closeness). Nevertheless, the findings from Studies 1 and 2 provide some of the first evidence that implicit self-esteem influences how people regulate dependence in romantic relationship interactions.

Narcissism

Studies 1 and 2 revealed opposing patterns of results for the effect of narcissism on negative approach verbal behaviors (e.g., criticizing partner, insulting or name-calling), revealing that how narcissists report behaving in a rejecting interaction with their romantic partner is quite different than how they actually behave during such an interaction. Why might narcissists report behaving in ways that affirm the relationship in Study 1, but display opposite, more defensive behaviors in Study 2?

Theory and research on narcissism asserts that narcissists are chronically concerned with maintaining a grandiose sense of self (see Morf & Rhodewalt, 2001 for a review), possibly making them more resistant to experimentally manipulated doubts

about their romantic partner's love (e.g., Foster & Campbell, 2005). Consistent with this idea, Study 1 revealed that when narcissists are asked to retrospectively report on an interaction where their romantic partner hurt them, they reported engaging in fewer negative behaviors. These results suggest that narcissists are able to self-protectively defend against doubts about their romantic partners' affections (and thus doubts about their own worthiness of love) by inaccurately describing their conflict behaviors as less negative. In this way, narcissists preserve inflated self-views (see Morf & Rhodewalt, 2001). However, this strategy for maintaining a grandiose sense of self may not be applicable during an actual conflict interaction.

Research suggests that narcissists will manage their real-life social interactions in ways that help maintain positive self-views, regardless of others feelings or impressions (e.g., Morf & Rhodewalt, 2001). As the results of Study 2 indicate, when relationship-threat is occurring in real time, it appears much more difficult for narcissists to regulate this threat by engaging in behaviors that affirm their relationship. Instead, they self-protectively defend the self from such threats by behaving badly toward their partner and reducing commitment to their romantic relationship. Consistent with this pattern of findings in Study 2, research exploring how narcissism relates to other threatening social interactions has revealed that, in response to an evaluator's negative feedback, narcissists rate the evaluator as more incompetent and less likeable (Kernis & Sun, 1994), and when narcissists are out-performed by another person, they rate that person as having a significantly more negative personality (Morf & Rhodewalt, 1993).

Importantly, there is very little research in the literature on narcissism exploring how narcissists respond to threatening interactions occurring within their *romantic* relationships (c.f. Foster & Campbell, 2005; Campbell and Foster, 2002), and I know of no research to date that has investigated this relationship using an observational methodology. Because narcissism only predicted self-reported and observer-rated verbal behaviors, the results from the current studies suggest that, during conflict, narcissists may be more likely to vocally defend the self than to use nonverbal channels for such defense. In addition, these findings provide some of the first evidence that narcissism predicts not only self-reported behavior, but also observer-rated behavior during a threatening romantic relationship interaction. Notably, the results for narcissism and verbal negativity were opposite across these two different methodologies, highlighting the importance of using different types of research methodologies to explore the role of narcissism in behavioral responses to relationship threat. The findings from Study 2 suggest that, as researchers, we should be careful in our interpretations of narcissists' retrospective reporting. Narcissists may misconstrue the realities of their romantic relationships as a way to maintain an inflated sense of self.

Limitations and Future Directions

Although the findings from Studies 1 and 2 are consistent with risk regulation processes, there are a few issues to be considered. First, neither explicit self-esteem nor implicit self-esteem predicted negative approach verbal (e.g., criticizing, name-calling) and nonverbal (e.g., negative tone, eye-rolling) behaviors. As previously proposed, one possible explanation for these findings is that explicit self-esteem is influencing self-

protection goals by orienting people away from conflict, as opposed to escalating the conflict. In addition, implicit self-esteem may be specific to the regulation of positive behaviors. Another possible explanation is that the nature of the interaction influenced the kind of behaviors people engaged in during the conflict discussion. Because participants knew they were being video-taped during the interaction, some participants may have been less likely to engage in overtly negative behaviors, like the negative approach behaviors. Moreover, participants were instructed to discuss an ongoing issue in their relationship, and, therefore, the conflict interaction did not represent the first time participants had discussed the problem. If the interaction scenario took place at the initial time or day of disagreement we may have observed more heated conversations. Future research could use an experience sampling or daily diary methodology to assess conflict behaviors as they occur in day-to-day life. However, these methodologies rely on participants' reporting of their own behaviors and are subject to the limitations of self-report data.

Second, both studies failed to find the interaction between implicit and explicit self-esteem predicting conflict behaviors. Previous research (as well as the current study) has noted that the correlation between implicit and explicit self-esteem is often small or non-significant (DeHart et al., 2006; Jordan et al., 2003), suggesting that there are indeed discrepancies between people's unconscious and conscious beliefs about the self. However, whether the combination of high explicit self-esteem and low implicit self-esteem (i.e., insecure high self-esteem) truly represents a more defensive, narcissistic personality has recently come under scrutiny (Bosson et al., 2008; Gregg & Sedikides,

2010). Though the current study found that narcissism predicted more self-protectively defensive behaviors, I failed to find evidence that people with insecure high self-esteem engaged in more negative behaviors, suggesting that the relation between implicit self-esteem, explicit self-esteem and narcissism is more complex than originally hypothesized. Nonetheless, it remains important for researchers to continue exploring the relation between implicit and explicit self-esteem to determine when they interact to predict responses to interpersonal threat.

A third issue worth considering includes the homogeneity of the sample in terms of both ethnicity and age. Specifically, participants were mostly Caucasian college students who comprised a restricted age range ($M_{\text{study1}} = 20.3$; $M_{\text{study2}} = 20.7$). In addition, the majority of participants in Study 2 were involved in relationships where they were dating, but not living with their romantic partner (as opposed to dating and living together or married). Though the risk regulation model has been applied to both dating and married partners (e.g. Murray et al., 2002), it is important to explore whether the current findings hold for different types of romantic relationships. In particular, it may be important to explore whether perceived partner commitment moderates the relation between implicit self-esteem and risk regulation processes in married relationships, which, by definition, represent more committed relationships. It may also be fruitful to consider whether implicit self-esteem and partner commitment interact to predict the conflict behaviors of newlyweds vs. people in long-term marriages. Finally, future research should explore whether explicit and implicit self-esteem influence relationship regulation in homosexual couples and more ethnically diverse populations.

Lastly, despite the strengths of multilevel modeling to explore how conscious and unconscious beliefs about the self influence risk regulation in dyadic interaction, the analyses from Study 2 are correlational in nature and do not allow us to make causal inferences. For example, we cannot know whether self-esteem caused people to behave a certain way during conflict. It is possible that other relationship variables or events influenced both participant's reports of self-esteem and their conflict behaviors. However, because Study 1 manipulated relationship threat using an experimental design, results which are consistent across both studies likely reflect the differential reactivity of people high and low in self-esteem to relationship threat. In addition, the findings of Study 2 are supported by theory and previous research on the self and relationship regulation dynamics.

In light of these limitations, the results of the current research still have important implications for understanding how conscious and unconscious beliefs about the self impact romantic relationship functioning. Though previous research has revealed that explicit self-esteem plays an important role in relationship functioning (e.g. Hazan & Shaver, 1987; Mikulincer, 1995; Murray, Bellavia et al., 2003; Simpson, Rholes, & Philips, 1996), the results of the current studies add to a growing body of research highlighting the importance of unconscious processes for regulating relationship dynamics (e.g., DeHart et al., 2004; DeHart, Pelham et al., 2009). Therefore, the current research bridges an important gap in the literature on self-esteem and close relationships by providing evidence that people's unconscious self-evaluations influence romantic relationship interactions.

APPENDIX A: SELF-ESTEEM AND NARCISSISM SCALES

Rosenberg Self-esteem Scale
(Rosenberg, 1965)

The next measure is a global measure of your feelings about yourself. Please answer the next ten items using the following scale. For each item, please circle one number that best corresponds with your choice.

1. I feel that I am a person of worth, at least on an equal basis with others.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

2. I feel that I have a number of good qualities.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

3. All in all, I am inclined to feel that I am a failure.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

4. I am able to do things as well as most other people.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

5. I feel I do not have much to be proud of.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

6. I take a positive attitude toward myself.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

7. On the whole, I am satisfied with myself.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

8. I wish I could have more respect for myself.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

9. At times I feel that I am useless.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

10. At times I think I am no good at all.

1	2	3	4	5	6	7
Disagree			neither agree			Agree
Very Much			nor disagree			Very Much

Narcissistic Personality Inventory, NPI
(Raskin & Hall, 1979)

Please indicate whether the following statements are true or false. Please circle the answer that best corresponds to your choice.

1. I see myself as a good leader
True False
2. I really like to be the center of attention
True False
3. I like to have authority over other people
True False
4. I will be a success
True False
5. I have a natural talent for influencing people
True False
6. I am assertive
True False
7. People always seem to recognize my authority
True False
8. I like to look at my body
True False
9. I like to look at myself in the mirror
True False
10. I am an extraordinary person
True False
11. I like to display my body
True False
12. I prefer to be a leader
True False
13. I think I am a special person

True False

14. I like to be complimented

True False

15. I am going to be a great person

True False

16. I know that I am good because everyone keeps telling me so

True False

17. Everyone likes to hear my stories

True False

18. I rarely depend on anyone else to get things done.

True False

19. I can make anybody believe anything

True False

20. I am a born leader

True False

21. I can read people like a book

True False

22. I am apt to show off if I get the chance

True False

23. I like to take responsibility for making decisions

True False

24. I always know what I am doing

True False

25. I can usually talk my way out of anything

True False

26. I can live my life in any way I want to

True False

27. I would do almost anything on a dare

True False

28. I expect a great deal from other people
True False
29. I wish somebody would someday write my biography
True False
30. I insist upon getting the respect that is due to me
True False
31. I will never be satisfied until I get all that I deserve
True False
32. I have a strong will to power
True False
33. I get upset when people don't notice how I look when I go out in public
True False
34. I find it easy to manipulate people
True False
35. I am more capable than other people
True False
36. Modesty doesn't become me
True False
37. I like to be the center of attention
True False
38. I like to start new fads and fashions
True False
39. I want to amount to something in the eyes of the world
True False
40. If I ruled the world, it would be a much better place
True False

APPENDIX B: RELATIONSHIP SURVEY

Relationship Survey

1. What is the gender of your romantic partner? (Circle one)

Male Female

2. In the space below, please indicate the number of YEARS you have been dating your current romantic partner. For example, if you have been dating for 5 years, 6 months, and 3 weeks, you would indicate "5" years in the space below.

3. In the space below, please indicate the number of MONTHS you have been dating your romantic partner. For example, if you have been dating for 5 years, 6 months, and 3 weeks, you would indicate "6" months in the space below.

4. In the space below, please indicate the number of WEEKS you have been dating your romantic partner. For example, if you have been dating for 5 years, 6 months, and 3 weeks, you would indicate "3" weeks in the space below.

5. Are you and your romantic partner: (Circle one)

1- dating and not living together

2 - dating and living together

3 - married and living together

6. Is your current romantic relationship monogamous? (Circle one)

1. Yes

2. No

7. Is your current romantic relationship a long-distance relationship? (Circle one)

1. Yes

2. No

Own Commitment

How committed are you in your current romantic relationship?

1	2	3	4	5	6	7
Not at						Very
All Committed						Committed

Perceived Partner Commitment

How committed is your partner to your current romantic relationship?

1	2	3	4	5	6	7
Not at						Very
All Committed						Committed

Pre-Conflict Own Love

(Simpson, Rholes, & Phillips, 1996)

How much *closeness* do you feel toward your romantic partner or your relationship?

1	2	3	4	5	6	7
Very little						Very much

How much *love* do you feel toward your romantic partner or your relationship?

1	2	3	4	5	6	7
Very little						Very much

How much *commitment* do you feel toward your romantic partner or your relationship?

1	2	3	4	5	6	7
Very little						Very much

How much of an *emotional bond* do you feel toward your partner or you relationship?

1	2	3	4	5	6	7
Very little						Very much

Pre-Conflict Relationship Satisfaction

(Adapted Murray, Holmes, & Griffin, 1996a and DeHart, Murray, Pelham, Rose, 2003)

Based on the scale provided, please circle the number that best corresponds to your choice for each of the questions below.

I am extremely happy with my romantic relationship.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

I have a very strong relationship with my romantic partner.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

I do not feel that my romantic relationship is successful.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

I am extremely satisfied with my romantic relationship.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

APPENDIX C: POST CONFLICT MEASURES

Post-Conflict Relationship Satisfaction

(Adapted Murray, Holmes, & Griffin, 1996a and DeHart, Murray, Pelham, Rose, 2003)

Based on the scale provided, please circle the number that best corresponds to how you feel RIGHT NOW.

Right now, I am extremely happy with my romantic relationship.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

Right now, I have a very strong relationship with my romantic partner.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

Right now, I do not feel that my romantic relationship is successful.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

Right now, I am extremely satisfied with my romantic relationship.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

PANAS

(Watson, Clark, & Tellegen, 1988)

Below are a number of different mood states. Please read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now. Use the following scale to record your answers:

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

_____ irritable	_____ afraid
_____ determined	_____ enthusiastic
_____ jittery	_____ scared
_____ ashamed	_____ excited
_____ proud	_____ attentive
_____ guilty	_____ upset
_____ inspired	_____ interested
_____ hostile	_____ nervous
_____ alert	_____ active
_____ strong	_____ distressed

Interpersonal Vulnerability Scale

(Murray et al., 2008)

Using the scale provided, please circle one number which best indicates how the interaction with your partner makes you feel RIGHT NOW.

Right now I feel ...

1. Happy

1	2	3	4	5	6	7
Not at all						Very

2. Angry

1	2	3	4	5	6	7
Not at all						Very

3. Hurt

1	2	3	4	5	6	7
Not at all						Very

4. Rejected

1	2	3	4	5	6	7
Not at all						Very

5. Betrayed

1	2	3	4	5	6	7
Not at all						Very

6. Included

1	2	3	4	5	6	7
Not at all						Very

7. Disappointed

1	2	3	4	5	6	7
Not at all						Very

8. Sad

1	2	3	4	5	6	7
Not at all						Very

9. Accepted

1	2	3	4	5	6	7
Not at all						Very

10. Unloved

1	2	3	4	5	6	7
Not at all						Very

11. Appreciated

1	2	3	4	5	6	7
Not at all						Very

12. Misunderstood

1	2	3	4	5	6	7
Not at all						Very

REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. NY: Sage.
- Alberts, J.K., & Driscoll, G. (1992). Containment versus escalation: The trajectory of couples' conversational complaints. *Western Journal of Communication, 56*, 394-412.
- Ambady, N., & Rosenthal, R. (1992). Thin slices of expressive behavior as predictors of interpersonal consequences: A meta-analysis. *Psychological Bulletin, 111*, 256-274.
- Andersen, S.M., & Chen, S. (2002). The relational self: An interpersonal social-cognitive theory. *Psychological Review, 109*, 619-645.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147-178.
- Bartholomew, K., & Horowitz, L.M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226-244.
- Baumeister, R. F., & Leary, M. E. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497-529.
- Bloom, B.L., Ascher, S.J., & White, S.W. (1978). Marital disruption as a stressor: A review and analysis. *Psychological Bulletin, 85*, 867-894.
- Bosson, J. K., Brown, R. P., Zeigler-Hill, V., & Swann, W. B., Jr. (2003). Self-enhancement tendencies among people with high explicit self-esteem: The moderating role of implicit self-esteem. *Self and Identity, 2*, 169-187.
- Bosson, J. K., Lakey, C. E., Campbell, K. W., Zeigler-Hill, V., Jordan, C. H., & Kernis, M. H. (2008). Untangling the links between narcissism and self-esteem: A theoretical and empirical review. *Social and Personality Psychology Compass, 2/3*, 1415 – 1439.

- Bosson, J. K., Swann, W. B., Jr., & Pennebaker, J. W. (2000). Stalking the perfect measure of implicit self-esteem: The blind men and the elephant revisited? *Journal of Personality and Social Psychology, 79*, 631-643.
- Brennan, K.A., & Shaver, P.R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin, 21*, 267-283.
- Burman, B., & Margolin, G. (1992). Analysis of the association between marital relationships and health problems: An interactional perspective. *Psychological Bulletin, 112*, 39-63.
- Campbell, W. K. (1999). Narcissism and romantic attraction. *Journal of Personality and Social Psychology, 77*, 1254-1270.
- Campbell, W.K., Bosson, J.K., Goheen, T.W., Lakey, C.E., & Kernis, M.H. (2007). Do narcissists dislike themselves 'Deep down inside'? *Psychological Science, 18*, 227-229.
- Campbell, W.K., & Foster, C.A. (2002). Narcissism and commitment in romantic relationships: An investment model analysis. *Personality and Social Psychology Bulletin, 28*, 484-495.
- Campbell, W.K., Foster, C.A., & Finkel, E.J. (2002). Does self-love lead to love for others? A story of narcissistic game playing. *Journal of Personality and Social Psychology, 83*, 340-354.
- Campbell, L. & Kashy, D.A. (2002). Estimating actor, partner and interaction effects for dyadic data using PROC SAS MIXED and HLM: A user friendly guide. *Personal Relationships, 9*, 327 – 342.
- Campbell, L., Simpson, J.A., Boldry, J., & Kashy, D.A. (2005). Perceptions of conflict and support in romantic relationships: The role of Attachment Anxiety. *Journal of Personality and Social Psychology, 88*, 510-531.
- Canary, D.J., Weger, H., & Stafford, L. (1991). Couples' argument sequences and their associations with relational characteristics. *Western Journal of Speech Communication, 55*, 159-179.
- Carstensen, L.L., Gottman, J.M., & Levenson, R.W. (1995). Emotional behavior in long-term marriage. *Psychology and Aging, 10*, 140-149.

- Carver, C.S., & White, T.L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology*, *67*, 319-333.
- Collins, N.L., & Feeney, B.C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, *78*, 1053-1073.
- Collins, N.L., & Feeney, B.C. (2004). Working models of attachment shape perceptions of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology*, *87*, 363-383.
- Collins, N.L., Ford, M.B., Guichard, A.C., & Allard, L.M. (2006). Working models of attachment and attribution processes in intimate relationships. *Personality and Social Psychology Bulletin*, *32*, 201-219.
- Collins, N.L., & Read, S.J. (1994). Cognitive representations of attachment: The structure and function of working models. *Advances in Personal Relationships*, *5*, 53-90.
- Cooley, C. H. (1902). *Human nature and the social order*. New York: Schocken.
- Creasy, G. (2002). Associations between working models of attachment and conflict management behavior in romantic couples. *Journal of Counseling Psychology*, *49*, 365-375.
- Daigen, V., & Holmes, J.G. (2000). Don't interrupt! A good rule for marriage? *Personal Relationships*, *7*, 185-201.
- DeHart, T., Longua, J.E., Gnedko, N., and O'Connor, J. (2009). In the mood for sex? Attachment style, risk regulation and sex in romantic relationships. *Manuscript in preparation*.
- DeHart, T., Longua, J.E., Smith, J. (*in press*). To enhance or protect the self?: The complex role of explicit and implicit self-esteem. To appear in Mark Alicke and Constantine Sedikides (Eds.) (2010). *The Handbook of Self-Enhancement and Self-protection*. New York: Guilford Press.
- DeHart, T., Murray, S.L., Pelham, B.W., & Rose, P. (2003). The regulation of dependency in parent-child relationships. *Journal of Experimental Social Psychology*, *39*, 59-67.
- DeHart, T. & Pelham, B.W. (2007). Fluctuations in state implicit self-esteem in response to daily negative events. *Journal of Experimental Social Psychology*, *43*, 157-165.

- DeHart, T., Pelham, B. W., & Murray, S. L. (2004). Implicit dependency regulation: Self-esteem, relationship closeness, and implicit evaluation of close others. *Social Cognition, 22*, 126-146
- DeHart, T., Pelham, B.W., Fiedorowicz, L., Carvallo, M., & Gabriel, S. (*in press*). Including others in the implicit self: Implicit evaluation of significant others. *Journal of Experimental Social Psychology*.
- DeHart, T., Pelham, B.W., & Tennen, H. (2006). What lies beneath: parenting style and implicit self-esteem. *Journal of Experimental Social Psychology, 42*, 1-17.
- DeHart, T., Tennen, H., Armeli, S., Todd, M., & Mohr, C. (2009). A diary study of implicit self-esteem, interpersonal interactions, and alcohol consumption in college students. *Journal of Experimental Social Psychology, 45*, 720-730.
- DeHart, T., Tennen, H., Armeli, S., Todd, M., & Affleck, G. (2008). Drinking to regulate negative romantic relationship interactions: The moderating role of self-esteem. *Journal of Experimental Social Psychology, 44*, 527 – 538.
- Elliot, A.J., Gable, S.L., & Mapes, R.R. (2006). Approach and avoidance motivation in the social domain. *Personality and Social Psychology Bulletin, 32*, 378-391.
- Ewart, C.K., Taylor, C.B., Kraemer, H.C., & Agras, W.S. (1991). High blood pressure and marital discord: Not being nasty matters more than being nice. *Health Psychology, 103*, 155-163.
- Feeney, J.A., & Noller, P. (1991). Attachment style and verbal descriptions of romantic partners. *Journal of Social and Personal Relationships, 8*, 187-215.
- Foster, J.D., & Campbell, W.K. (2005). Narcissism and resistance to doubts about romantic partners. *Journal of Research in Personality, 39*, 550-557.
- Fraley, R.C., & Shaver, P.R. (1998). Airport separations: A naturalistic study of adult attachment dynamics in separating couples. *Journal of Personality and Social Psychology, 75*, 1198-1212.
- Gable, S.L. (2006). Approach and avoidance social motives and goals. *Journal of Personality, 74*, 175-222.
- Gable, S.L., Reis, H.T., & Elliot, A.J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology, 78*, 1135-1149.

- Gawronski, B. & Bodenhausen, G.V. (2006). Associative and propositional processes in evaluation: An integrative review of implicit and explicit attitude change. *Psychological Bulletin*, 132, 692-731.
- Gillath, O., Mikulincer, M., Fitzsimons, G.M., Shaver, P.R., Schachner, D.A., & Bargh, J.A. Automatic activation of attachment-related goals. *Personality and Social Psychology Bulletin*, 32, 1375-1388.
- Gonzaga, G.C., Keltner, D., Londahl, E.A., Smith, M.D. (2001). Love and the commitment problem in romantic relations and friendship. *Journal of Personality and Social Psychology*, 81, 247-262.
- Gonzaga, G.C., Turner, R.A., Keltner, D., Campos, B., & Altemus, M. (2006). Romantic love and sexual desire in close relationships. *Emotion*, 6, 163-179.
- Gottman, J.D. (1998). Psychology and the study of marital process. *Annual Review of Psychology*, 49, 169-197.
- Gottman, J.M., Coan, J., Carrere, S., & Swanson, C. (1998). Predicting marital happiness and stability from newlywed interactions. *Journal of Marriage and Family*, 60, 5-22.
- Gottman, J.M., & Driver, J.L. (2005). Dysfunctional marital conflict and everyday marital interaction. *Journal of Divorce and Remarriage*, 43, 63-77.
- Gottman, J.D. & Levenson, R.W. (2000). The timing of divorce: predicting when a couple will divorce over a 14-year period. *Journal of Marriage and the Family*, 62, 737-745.
- Gottman, J.M., & Notarius, C.I. (2000). Decade review: Observing marital interaction. *Journal of Marriage and the Family*, 62, 927-947.
- Greenier, K.D., Kernis, M.H., McNamara, C.W., Waschull, S.B., Berry, A.J., Herlocker, C.E., & Abend, T.A. (1999). Individual differences in reactivity to daily events: Examining roles of stability and level of self-esteem. *Journal of Personality*, 67, 185-208.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4-27.
- Greenwald, A. G., & Farnham, S. D. (2000). Using the implicit association test to measure self-esteem and self-concept. *Journal of Personality and Social Psychology*, 79, 1022-1038.

- Gregg, A. P., & Sedikides, C. (2010). Narcissistic Fragility: Rethinking its links to explicit and implicit self-esteem. *Self and Identity*, 9, 142-161. .
- Griffin, D. W., & Ross, L. (1991). Subjective construal, social inference and human misunderstanding. *Advances in Experimental Social Psychology*, 24, 319 – 359.
- Hazan, C., & Shaver, P.R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, 5, 1-22.
- Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524.
- Hetts, J. J., Sakuma, M., & Pelham, B.W. (1999). Two roads to positive regard: Implicit and explicit self-evaluation and culture. *Journal of Experimental Social Psychology*, 1-48.
- Hetts, J. J & Pelham, B.W. (2001) A case for the nonconscious self-concept. In G.B. Moskowitz (Ed.) *Cognitive social psychology: The Princeton Symposium on the Legacy and Future of Social Cognition* (pp. 105-123). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Heyman, R.E. & Vivian, D.E. (2000). RMICS, Rapid Marital Interaction Coding System, Version 1.7. State University of New York at Stony Brook: www.psy.sunysb.edu/marital/
- Heyman, R. E., Eddy, J. M., Weiss, R. L., & Vivian, D. (1995). Factor analysis of the Marital Interaction Coding System. *Journal of Family Psychology*, 9, 209-215.
- Heyman, R.E., Weiss, R.L., & Eddy, J.M. (1995). Marital interaction coding system: Revision and empirical evaluation. *Behavior Research and Therapy*, 33, 737-746.
- Impett, E.A., Peplau, L.A., & Gable, S.L. (2005). Approach and avoidance sexual motives: Implications for person and interpersonal well-being. *Personal Relationships*, 12, 465-482.
- Impett, E.A., Strachman, A., Finkel, E., Gable, S.L. (2008). Maintaining sexual desire in intimate relationships: The importance of approach goals. *Journal of Personality and Social Psychology*, 94, 808-823.
- Jordan, C. H., Spencer, S. J., Zanna, M. P., Hoshino-Browne, E., & Correll, J. (2003). Secure and defensive high self-esteem. *Journal of Personality and Social Psychology*, 85, 969-978.

- Jordan, C. H., Spencer, S. J., & Zanna, M. P. (2005). Types of high self-esteem and prejudice: How implicit self-esteem relates to ethnic discrimination among high explicit self-esteem individuals.
- Kazarian, S.S., & Martin, R.A. (2004). Honour styles, personality, and well-being among Lebanese university students. *European Journal of Personality*, *18*, 209-219.
- Kenny, D. A. (1996). Models of interdependence in dyadic research. *Journal of Social and Personal Relationships*, *13*, 279-294.
- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert & S. T. Fiske (Eds.), *The handbook of social psychology*, Vol. 1 (4th ed., pp. 233-265). New York: McGraw-Hill.
- Kernis, M. H. (2005). Measuring self-esteem in context: The importance of stability of self-esteem in psychological functioning. *Journal of Personality*, *73*, 1569-1606.
- Kernis, M. H., Abend, T. A., Goldman, B. M., Shrira, I., Paradise, A. N., & Hampton, C. (2005). Self-serving responses arising from discrepancies between explicit and implicit self-esteem. *Self and Identity*, *4*, 311-330.
- Kernis, M. H., Goldman, B. M., & Paradise, A. N. (2004). Fragile Self-esteem, overreactivity, and satisfaction in close relationships. Unpublished Data.
- Kernis, M. H., Lakey, C. E., & Heppner, W. L. (2008). Secure versus fragile high self-esteem as a predictor of verbal defensiveness: converging findings across three different markers. *Journal of Personality*, *76*, 477-512.
- Kernis, M.H., & Sun, C.R., (1994). Narcissism and reactions to interpersonal feedback. *Journal of Research in Personality*, *28*, 4-13.
- Kitayama, S., & Karasawa, M. (1997). Implicit self-esteem in Japan: Name letters and birthday numbers. *Personality and Social Psychology Bulletin*, *23*, 736-742.
- Koole, S. L. & DeHart, T. (2005). Self-affection without self-reflection: Origins, models and consequences of implicit self-esteem. C. Sedikides & S. Spencer (Eds.), *The Self in Social Psychology*.
- Koole, S.L., Dijksterhuis, A., & van Knippenberg, A. (2001). What's in a name: Implicit self esteem and the automatic self. *Journal of Personality and Social Psychology*, *80*, 669-685.

- Lambird, K. H. & Mann, T. (2006). When do ego threats lead to self-regulation failure? Negative consequences of defensive high self-esteem. *Personality and Social Psychology Bulletin*, 32, 1177 – 1187.
- Leary, M.R., Tambor, E.S., Terdal, S.K., & Downs, D.L. (1995) Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518-530.
- Levenson, R.W., & Gottman, J.M. (1983). Marital interaction : Physiological linkage and affective exchange. *Journal of Personality and Social Psychology*, 45, 587-597.
- Masterson, J.F. (1988). *The Search for the Real Self. Unmasking the Personality Disorder of our Age.* New York: The Free Press.
- Mead, G.H. (1934). *Mind, self, and society.* Chicago, IL: University of Chicago Press.
- Mikulincer, M. (1995). Attachment style and the mental representation of the self. *Journal of Personality and Social Psychology*, 69, 1203-1215.
- Mikulincer, M. (1998). Attachment working models and the sense of trust: An exploration of interaction goals and affect regulation. *Journal of Personality and Social Psychology*, 74, 1209-1224.
- Mikulincer, M., Gillath, O., & Shaver, P.R. (2002). Activation of attachment system in adulthood: Threat-related primes increased the accessibility of mental representation of attachment figures. *Journal of Personality and Social Psychology*, 83, 881-895.
- Mikulincer, M. & Shaver, P.R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. Zanna (Ed.), *Advances in Experimental Social Psychology*, 35, 53 – 152.
- Morf, C.C. & Rhodewalt, F. (1993). Narcissism and self-evaluation maintenance: Explorations in object relations. *Personality and Social Psychology Bulletin*, 19, 668-676.
- Morf, C.C. & Rhodelwalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177-196.
- Murray, S.L., Bellavia, G., Feeney, B., Holmes, J.G., & Rose, P. (2001). The contingencies of interpersonal acceptance: When romantic relationships function as a self-affirmational resource. *Motivation and Emotion*, 25, 163-189.

- Murray, S. L., Bellavia, G., Rose, P., & Griffin, D. (2003). Once hurt, twice hurtful: How perceived regard regulates daily marital interaction. *Journal of Personality and Social Psychology, 84*, 126-147.
- Murray, S.L., Derrick, J.L., Leder, S., & Holmes, J. G. (2008). Balancing connectedness and self-protection goals in close relationships: A levels of processing approach. *Journal of Personality and Social Psychology, 94*, 429-459.
- Murray, S.L., Griffin, D.W., Rose, P., & Bellavia, G. (2003). Calibrating the sociometer: The relationship contingencies of self-esteem. *Journal of Personality and Social Psychology, 85*, 63-84.
- Murray, S.L., Holmes, J.G., & Collins, N.L. (2006). Optimizing assurance: The risk regulation system in relationships. *Psychological Bulletin, 132*, 641-666.
- Murray, S. L., Holmes, J. G., & Griffin, D. (1996a). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology, 70*, 79-98.
- Murray, S. L., Holmes, J. G., & Griffin, D. (1996b). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. *Journal of Personality and Social Psychology, 71*, 1155-1180.
- Murray, S.L., Holmes, J.G., & Griffin, D.W. (2000). Self-esteem and the quest for felt security: How perceived regard regulates attachment processes. *Journal of Personality and Social Psychology, 78*, 478-498.
- Murray, S.L., Holmes, J.G., Griffin, D.W., Bellavia, G., & Rose, P. (2001). The mismeasure of Love: How self-doubt contaminates relationship beliefs. *Personality and Social Psychology Bulletin, 27*, 423-436.
- Murray, S.L., Rose, P., Bellavia, G.M, Holmes, J.G., & Kusche, A.G. (2002). When rejection stings: How self-esteem constrains relationship-enhancement processes. *Journal of Personality and Social Psychology, 83*, 556 – 573.
- Murray, S.L., Rose, P., Holmes, J.G., Derrick, J., Podchaski, E.J., & Griffin, D.W. (2005). Putting the partner within reach: A dyadic perspective on felt security in close relationships. *Journal of Personality and Social Psychology, 88*, 327-347.
- Myers, E., Zeigler-Hill, V., & Barry, C. (2008). Ripples in the reflecting pool: Narcissism and reactions to the recollection of negative relationship events. *Manuscript under review*.

- Nezlek, J. B. (2001). Multilevel random coefficients analyses of event- and interval-contingent data in social and personality psychology research. *Personality and Social Psychology Bulletin*, 27, 771-785.
- Noller, P. (2005). Attachment insecurity as a filter in the decoding and encoding of nonverbal behavior in close relationships. *Journal of Nonverbal Behavior*, 29, 171-176.
- Noller, P. (1982). Channel consistency and inconsistency in the communications of married couples. *Journal of Personality and Social Psychology*, 43, 732-741.
- Noller, P., & Feeney, J.A. (1994). Relationship satisfaction, attachment, and nonverbal accuracy in early marriage. *Journal of Nonverbal Behavior*, 18, 199-221.
- Noller, P., Feeney, J.A., Bonnell, D., & Callan, V.J. (1994). A longitudinal study of conflict in early marriage. *Journal of Social and Personal Relationships*, 11, 233-252.
- Olson, M. A., Fazio, R. H., & Hermann, A. D. (2007). Reporting tendencies underlie Discrepancies between implicit and explicit measures of self-esteem. *Psychological Science*, 18, 287-291.
- Pelham, B.W. & Hetts, J. J. (1999). Implicit and explicit personal and social identity: Toward a more complete understanding of the social self. In T.R. Tyler, R.M. Kramer, & O.P. John (Eds.) *The psychology of the social self*. (pp. 115-143). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Powers, Pietromanaco, Gunlicks & Sayer (2006). Dating couples' attachment styles and patters of coritcol reactivity and recovery in response to a relationship conflict. *Journal of Personality and Social Psychology*, 90, 613-628.
- Raskin, R., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*, 45, 590.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, New Jersey: Princeton University Press.
- Schachner, D.A., Shaver, P.R., & Mikulincer, M. (2005). Patterns of nonverbal behavior and sensitivity in the context of attachment relationships. *Journal of Nonverbal Behavior*, 29, 141-169.
- Shrout, P.E. & Fleiss, J.L. (1979) Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 2, 420-428.

- Simpson, J.A., Ickes, W., & Grich (1999). When accuracy hurts: Reactions of anxious-ambivalent dating partners to a relationship-threatening situation. *Journal of Personality and Social Psychology*, *76*, 754 – 769.
- Simpson, J.A., Rholes, S.W. & Philips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology*, *71*, 899-914.
- Spalding, L.R. & Hardin, C.D. (1999). Unconscious unease and self-handicapping: Behavioral consequences of individual differences in implicit and explicit self-esteem. *Psychological Science*, *10*, 535-539.
- Tucker, J.S., & Anders, S.L. (1998). Adult attachment and nonverbal closeness in dating couples. *Journal of Nonverbal Behavior*, *22*, 109-124.
- Vincent, J.P., Friedman, L.C., Nugent, J., & Messerly, L. (1979). Demand characteristics in observations of marital interaction. *Journal of Consulting and Clinical Psychology*, *47*, 557-566.
- Young, A.M. & Acitelli, L.K. (1998). The role of attachment style and relationship status of the perceiver in the perceptions of romantic partner. *Journal of Social and Personal Relationships*, *15*, 161-173.
- Zeigler-Hill, V. (2006). Discrepancies between implicit and explicit self-esteem: Implications for narcissism and self-esteem instability. *Journal of Personality*, *74*, 119-14.

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DISSERTATION APPROVAL SHEET

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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