

**Behavioral Responses to Romantic Rival Threat**

by

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The ways in which people (targets) behave in response to romantic rivals—people who may capture their romantic partner’s interest—may have implications for important relational processes. The present study examined the effects of romantic rival threat on targets’ responsiveness toward their partners. In accordance with risk regulation theory, I predicted that targets’ levels of trait self-esteem would modulate their responsiveness when faced with rival threat: I hypothesized that when under high (vs. low) rival threat, low self-esteem targets (LSEs)—who readily detect signs of relationship threat and subsequently self-protectively distance themselves from their partners (Murray, Holmes, & Collins, 2006)—would decrease their responsiveness, whereas high self-esteem targets (HSEs)—who typically maintain or even increase their connection with their partners when under threat (Murray et al., 2006)—would behave just as (if not more) responsively. I further predicted that an increase in state jealousy would explain why LSEs would reduce their responsiveness under high (vs. low) threat. One-hundred and thirty-seven couples participated in a lab study, in which I measured targets’ trait self-esteem, experimentally manipulated rival threat, and examined the effects of rival threat condition on targets’ feelings of state jealousy and on targets’ responsiveness (coder-rated and self-reported) to a negative disclosure from their partner. As expected, LSE targets were more likely to report feeling jealous in the high (vs. low) threat condition; HSE targets’ likelihood of jealousy was unaffected by condition. However, target self-esteem did not interact with condition to predict responsiveness. Unexpectedly, targets who received a disclosure in which their partners expressed

more positivity (while discussing a negative event) tended to behave more responsively than targets who received a disclosure in which their partners expressed less positivity, but this association only emerged in the high threat condition. Possible reasons for the observed pattern of results are discussed.

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## **1.0 Introduction**

Close relationships can furnish people's lives with a host of benefits. They promote basic survival and reproduction (Buss, 1995), provide people with the sense that their lives are meaningful (Stillman & Lambert, 2013), and facilitate life satisfaction, happiness (Diener & Seligman, 2002), and personal growth (Gable & Reis, 2006). Research has even suggested that strong relationships have causal effects on physical health, promoting favorable health outcomes and guarding against unfavorable ones (Holt-Lunstad & Smith, 2011). Because close relationships are central to overall wellbeing, it is critical to understand the factors that may impede people's ability to form and maintain meaningful relationships. I focus here on one particularly important type of relationship: romantic relationships.

### **1.1 Romantic Rival Threat and Jealousy**

Many events and experiences can threaten romantic relationships. Events that occur within the relationship—such as perceiving a partner as behaving critically (Murray, Bellavia, Rose, & Griffin, 2003), or unresponsively (Feeney & Lemay, 2012)—can lead people to believe that their relationship is in danger because these events raise questions about a partner's love and commitment. Yet, sometimes, threat can also stem from sources external to the relationship. For example, attractive, alternative partners who capture one's own interest may tempt one to cheat on or leave one's current partner (e.g., Ritter, Karremans, & van Schie, 2010). Relatedly, romantic rivals—or people who seem to capture one's partner's interest—may lead the partner to redirect

his/her time and affection toward the rival, at one's own expense (e.g., Slotter, Lucas, Jakubiak, & Lasslett, 2013). The current study examines this latter type of external threat—romantic rival threat—and investigates how people respond when faced with such threats.

Romantic rivals represent a particularly potent threat to relationships. Specifically, romantic rivals may endanger the quality or stability of relationships by tempting people to cheat on their current partners or to leave their ongoing relationships (White & Mullen, 1989). Indeed, Schmitt (2004) estimated that about 50% of Americans have abandoned a partner in favor of a rival. Other work has demonstrated that divorcees most commonly identify infidelity as the reason for their divorce (Amota & Previtti, 2003). Given the threat that romantic rivals pose to ongoing relationships, it is not surprising that researchers have sought to understand how romantic rival threat may undermine relational wellbeing.

One key variable that may link the presence of a potential rival to relationship wellbeing is jealousy: a cognitive-motivational state that facilitates behavior aimed at reducing rival threat (White & Mullen, 1989). According to several prominent models of jealousy, the real or imagined presence of a rival arouses jealous cognition (i.e., appraisals of the presence and severity of rival threat) and jealous emotion (e.g., the combination of fear, anger, and sadness; Sharpsteen, 1995), which in turn spur jealous behavior intended to combat rival threat (Pfeiffer & Wong, 1989; White, 1981). A good deal of research has focused on the conditions under which jealousy is likely to be experienced, examining factors—such as individual differences (e.g., low self-esteem, high neuroticism, low extraversion, and attachment anxiety; Dijkstra & Barelds, 2008; Radecki-Bush, Farrell, & Bush, 1993) and features of the situation (e.g., the rival's superiority in domains relevant to one's self-concept; DeSteno & Salovey, 1996)—that predict greater jealousy. Given that the behavioral responses to rival threat and jealousy—rather than the experience of cognitive and/or

emotional jealousy per se—likely have important implications for relational wellbeing (Guerrero & Andersen, 1998), it is important to examine behavioral responses to rival threat and the jealousy that it produces.

Despite lay theory that paints jealousy —colloquially referred to as the "green-eyed monster"—as undesirable, some theorists have argued that experiencing jealousy can sometimes be helpful: Jealousy alerts people to potential rival threats and enables them to mobilize efforts to prevent a partner from defecting from the relationship and/or efforts to stave off rivals (Buss, 2002; Buss & Haselton, 2005; Harris & Darby, 2010; Henniger & Harris, 2014). But do people respond to rival-threat-induced jealousy in pro-relational ways? Or might jealousy sometimes fuel behaviors that further jeopardize relationships? McNulty and Fincham (2012) argue that psychological constructs can be either helpful or harmful based on the context in which they occur. Features of the person experiencing threat, for example, may influence how that person behaviorally responds to that threat (e.g., Finkel & Campbell, 2001), which should have important implications for relational wellbeing. Drawing on this logic, the current study investigates how and for whom rival threat, and the jealousy that it induces, contribute to behavior that is likely to harm (versus potentially help) relationships.

## **1.2 Behavioral Responses to Rival Threat and Jealousy**

Researchers examining behavioral responses to rival threat and rival-threat-induced jealousy have shown that people can respond to this relationship threat in a variety of ways, but researchers' ability to make predictions about which types of responses are likely to emerge is currently limited. For example, some researchers have developed taxonomies to identify and

classify the types of responses that people report enacting in situations of rival threat and jealousy (e.g., Buss, 1988; Guerrero, Andersen, Jorgensen, Spitzberg, & Eloy, 1995), which include behaviors such as aggressing against the partner and/or rival, vigilantly monitoring the partner's potential relationship with the rival, making oneself appear more attractive to the partner, and emphasizing one's love and care for the partner, among others. Despite much interest in responses to rival threat, however, researchers do not have a good understanding of what behaviors people actually enact when faced with rival threat because past research typically has not examined real behavioral responses in contexts in which people actually experience rival threat.

Research investigating behavioral responses to rival threat and the jealousy that it produces has relied primarily on retrospective reports of such responses in correlational work (e.g., Guerrero et al., 1995) or hypothetical scenarios of rival threat in experimental work (for an exception, see Simpson, Ickes, & Blackstone, 1995). As Harris and Darby (2010) suggest, memory failure or socially desirable responding may hinder accurate reporting of past responses, and methods that feature hypothetical scenarios of rival threat too may limit the validity of results because responses to hypothetical situations can inaccurately reflect people's responses to more authentic situations. In a similar vein, DeSteno, Valdesolo, and Bartlett (2006) have noted that strong empirical evidence of processes related to jealousy requires that researchers measure behavioral responses to experimentally manipulated experiences of jealousy; yet, only a few of studies have met such conditions (e.g., DeSteno et al., 2006; Maner, Miller, Rouby, & Gailliot, 2009). To my knowledge, no experiments to date have investigated how targets of rival threat regulate their behavior toward their current romantic partners during real-time experiences of experimentally-manipulated rival threat and/or jealousy. Thus, I sought to make a novel contribution to the rival threat and jealousy literature—and to the close relationships literature more broadly—by making a rare attempt to

capture behavioral evidence of how people respond to rival threat and the jealousy that rival threat triggers. Specifically, I manipulated an authentic experience of rival threat in the lab, and examined its effects—as well as the effects of the resulting jealousy—on targets' behavior directed toward their partners (as rated by coders).

Despite these typical methodological limitations described above, a great deal of research has focused on factors associated with responses to jealousy. The responses that have most often been examined are outlined in Buss's (1988) influential taxonomy of mate retention tactics. This taxonomy describes 19 behavioral strategies intended to buffer against the potential loss of one's relationship to rivals (i.e., mate retention tactics), such as *intrasexual threats* (e.g., warning rivals to stay away from the partner), *threaten infidelity* (e.g., attempting to make the partner feel jealous), *resource display* (e.g., buying the partner a gift), and *derogation of mate to competitors* (e.g., disparaging the partner to potential rivals). Some past work, for example, has shown gender differences in the types of tactics people most often report having used (e.g., men report more use of *intrasexual threats*, whereas women report more use of *threaten infidelity*; Buss, 1988), and that some personality factors are associated with self-reported use of broader categories that comprise such tactics (e.g., agreeableness is negatively correlated with *direct guarding*, a category that includes the tactics of monopolizing the partner's time, concealing the partner from rivals, and monitoring the partner's potential relationship with the rival; Holden, Zeigler-Hill, Pham, & Shackelford, 2013).

Whereas existing research examining such responses has typically examined predictors of what Buss, Shackelford, and colleagues (Miner, Shackelford, & Starratt, 2009; Shackelford & Buss, 1997) call "cost-inflicting tactics"—behaviors that penalize or threaten to penalize the partner for his/her potential relationship with a rival—far less is known about pro-relational or

“benefit-provisioning” responses: behaviors that attempt to deter the partner's involvement with rivals by increasing the rewards that the partner derives from the current relationship. Moreover, Neal and Lemay (2013)—who examined the association between fluctuations in daily perceived rival threat and a subset of cost-inflicting behaviors—have called for future research to examine the effects of rival threat on other types of mate retention tactics, including the benefit-provisioning tactic of *emphasizing love and care* (i.e., being helpful, kind, caring, and affectionate toward the partner). Accordingly, the present study examines the effects of rival threat and the resulting jealousy on a behavioral manifestation of the particularly understudied and pro-relational tactic of *emphasizing love and care*.

Theory and research suggest that pro-relational types of responses—such as *emphasizing love and care*—should be particularly effective at decreasing the likelihood that the partner will defect from the relationship in favor of a rival because it provides positive incentives to the partner for remaining in his/her current relationship, compared to cost-inflicting types of responses (e.g., *monopolizing mate's time* or *emotional manipulation*; Miner et al., 2009; Shackelford & Buss, 1997). Interestingly, people appear to recognize that individuals experiencing jealousy are better equipped to protect their relationships from a partner's involvement with a rival when they use relationship-promoting responses: Buss (1988) asked participants to rate the effectiveness of specific behaviors that represent each mate retention tactic that he had identified and found that participants rated *emphasizing love and care* as the most effective tactic that individuals could use to prevent their partners from abandoning them in favor of a rival.

Enacting this relationship-promoting mate retention tactic (*emphasizing love and care*) when faced with jealousy, however, is likely to be challenging. Research examining behavioral responses to negative emotion more generally suggests that negative affect may sometimes impede

pro-social behavior. For example, past work indicates that when people experience more negative emotion (e.g., upset, scared, distressed) than they typically do, they are less likely to provide support to their spouses on the following day (Iida, Stephens, Rook, Franks, & Salem, 2010). Given that jealousy involves experiencing negative emotion (Sharpsteen, 1995), it is perhaps surprising that people report that *emphasizing love and care* is their most common behavioral response to rival threat (Buss, 1988). Accordingly, it is important to establish whether this seemingly popular and relationship-promoting response is one that people actually enact when they are feeling jealous, as their self-reports suggest. The current study sought to examine this possibility and—if people do, indeed, enact this type of response—to investigate who might be likely to respond in such a way.

### **1.3 Individual Differences in Responses to Rival Threat: Self-Esteem and Risk Regulation**

Behavioral responses to rival threat and jealousy may not be uniform. Indeed, Neal and Lemay (2013) have suggested that future research should examine "behavioral responses to infidelity threat and the person, situation, and relationship factors that moderate these responses." Trait self-esteem—a person's overall attitude about the self (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995)—is a person factor that seems likely to moderate such behavioral responses. Self-esteem influences experiences and expectations of relational processes, and governs people's responses to other types of relational threat (e.g., Murray, Holmes, & Griffin, 2000). People with high self-esteem (HSEs) hold favorable self-views, whereas people with low self-esteem (LSEs) have less positive, or less clear, self-views. But how might trait self-esteem influence responses to rival threat situations?

Responses to rival threat—and relationship threat more generally—likely depend on self-esteem because self-esteem guides people’s inferences about their partners’ positive regard for them (Murray et al., 2000). On one hand, people who think that they possess valuable qualities overall (HSEs) trust that their partners, too, find them valuable. On the other hand, people who hold less positive views about themselves (LSEs) doubt their partners’ positive regard. Based on these divergent appraisals of a partner’s positive regard, Murray and colleagues (Murray, Holmes, & Collins, 2006) have developed a risk regulation model that explains how people manage the conflicting goals of seeking closeness with their partners and avoiding painful rejection. The risk regulation model holds that, in situations involving relationship threat, the way in which people balance these conflicting motives depends on their appraisals of perceived partner acceptance—an evaluation that differs between HSEs and LSEs (Murray et al., 2006).

LSEs tend to underestimate and question their partners’ care and regard for them (Murray et al., 2000). When LSEs experience rejection, therefore, LSEs incur a greater, proportional loss to their already fragile sense of value than individuals who are confident in their partners’ positive regard for them (HSEs; Murray et al., 2006). Accordingly, LSEs are acutely sensitive to potential threats, such that signs of threat trigger an alarm of negative emotion, which in turn motivates self-protection behavior. Because connection attempts with their partners in the presence of threat seem particularly risky to LSEs—feeling less positively regarded by their partners—LSEs tend to protect themselves from potential rejection by limiting dependence on and psychologically distancing themselves from their partners (Murray et al., 2006).

Consistent with the idea that LSEs prioritize self-protection when confronted with threat, Murray, Holmes, MacDonald, and Ellsworth (1998) found that when LSEs brought to mind a time that they disappointed their partners, they reported less certainty in their partners’ acceptance and

devalued their partners, relative to LSEs who did not recall a past transgression. In contrast, in the absence of threat or when LSEs feel highly regarded by their partners, LSEs seem to be quite interested in pursuing connection goals. For example, when Gaucher and colleagues (2012) experimentally enhanced LSEs' perceived regard by having participants write about a time during which a close friend admired the them, LSEs (in comparison to LSEs who did not receive a boost in perceived regard) were more likely to engage in an intimacy-promoting, yet risky, interpersonal behavior: expressing negativity to a friend in a videotaped disclosure.

HSEs, in contrast, trust that their partners care about and value them. Accordingly, HSEs' sensitivity to and response to relationship threats differ from LSEs'. Because HSEs feel positively regarded by their partners, HSEs, feeling less sensitive to signs of relationship threats, more readily discount such threat (Murray et al., 2006). Moreover, when HSEs do face relationship threats, HSEs' confidence in their partners' acceptance and regard facilitates their pursuit of connection goals (Cavallo, Holmes, Fitzsimons, Murray, & Wood, 2012; Murray et al., 2006). There is some discrepancy in the literature, however, as to whether HSEs pursue connection goals to a greater extent under threat than when no threat is present (e.g., Murray, Bellavia, Rose, & Griffin, 2003), or whether HSEs pursue connection goals to similar degrees, regardless of threat (e.g., Murray, Holmes, MacDonald, & Ellsworth, 1998).

Some research has provided evidence for each of these possibilities. For example, Murray, Rose, Bellavia, Holmes, and Kusche (2002) manipulated relationship threat in one study by providing participants with bogus feedback that either (a) their partners held covert grievances about their behavior or personality, which would fuel relational conflict (threat condition), or (b) their relationships were normal (control condition); they then measured connection. They found that HSEs in the threat condition reported greater assurance in their partners' positive regard, more

positive evaluations of their partners, and greater closeness to their partners, compared to HSEs in the control condition. Murray et al. (1998), however, found that HSEs who brought to mind a time that they disappointed their partners were comparably certain that their partners would forgive them for future transgressions and were more benevolent in their evaluations of their partners' value and goodness, compared to HSEs in a control condition (i.e., those who did not recall a similar event). Despite these different patterns of findings, previous work supports the idea that HSEs at the very least maintain their connection to their partners under threat—that is, they do not tend to self-protectively distance themselves from their partners as LSEs do—and they sometimes even draw closer when faced with threat.

Given that risk regulation processes orient LSEs toward self-protection and HSEs toward connection when under relationship threat, self-esteem is likely an important predictor of how people behave toward their partners when they encounter romantic rival threat—a possibility that risk regulation researchers have not yet examined. If the typically-observed risk regulation patterns do emerge in the face of rival threat, LSEs' self-protectiveness could be particularly problematic for their relational well-being; self-protectively pulling away from partners when LSEs perceive the real or imagined presence of a threatening rival may jeopardize the stability of their relationships by increasing the likelihood that their partners would instead seek connection with people outside of their relationship.

#### **1.4 Responsiveness**

Self-protection versus connection behavior may be captured by a core, organizing construct in relationship science: partner responsiveness (Reis, 2012). Responsiveness involves the degree

to which people respond to their partners with care, understanding, and validation (Reis, Clark, & Holmes, 2004) and appears to represent Buss's (1988) understudied mate retention tactic of emphasizing love and care well. Given that responsiveness plays a critical role in the development and maintenance of intimacy (Reis & Shaver, 1988), the potential effects of rival threat and jealousy on responsiveness have important implications for relational wellbeing.

Some preliminary experimental evidence—albeit from a study employing a hypothetical paradigm—suggests that rival threat does, indeed, affect responsiveness (Walsh & Forest, 2017). Findings from an experiment employing an imagined rival threat and hypothetical response paradigm revealed that romantically-involved high threat condition participants (i.e., participants who imagined that they overheard their partners reciprocate a rival's flirtation) replied less responsively—as rated by coders—to a hypothetical email disclosure from their partners, compared to low threat participants (i.e., participants who imagined that their partners politely rejected the rival's flirtation). State jealousy mediated this condition effect on responsiveness: Participants in the high (vs. low) threat condition felt more jealous, which, in turn, was associated with less responsiveness. These findings are noteworthy in light of Buss's (1988) finding that people report most frequently responding to jealousy by emphasizing their love and care for their partners.

Unexpectedly, in the aforementioned experiment, self-esteem did not moderate the direct effect of threat condition on responsiveness, the effect of threat condition on jealousy, or the indirect effect of threat condition on responsiveness via state jealousy (Walsh & Forest, 2017). On one hand, these findings may suggest that rivals represent a particularly potent threat to relationships—one that causes even HSEs, who tend to connect under threat—to pull away from their partners. On the other hand, HSEs may have decreased their responsiveness under high (vs.

low) threat because of the hypothetical nature of the study, during which participants were aware that their partners would not actually receive their response; when participants believe that their partners will actually receive their (un)responsive reply to their partners' real disclosure, however, HSEs may be less inclined to decrease their responsiveness. Accordingly, the current work further investigates the effect of rival threat on responsiveness, and examines the potential moderating role of trait self-esteem. In addition to these primary aims, the present research complements prior work on responsiveness. Whereas prior work has focused on how features of the support provider (e.g., Maisel & Gable, 2009) or relationship (e.g., Murray, Holmes, Bellavia, Griffin, & Dolderman, 2002) affect responsiveness, the current work examines a possible situational determinant of responsiveness: rival threat.

### **1.5 The Current Study**

In this experiment, I manipulated rival threat (high vs. low threat), measured state jealousy, examined targets' (of rival threat) responsiveness to their romantic partners, and assessed a potential moderator of responses to rival threat: target trait self-esteem. In accordance with risk regulation theory, I hypothesized that rival threat and self-esteem would interact to predict target responsiveness. Specifically, I predicted that: (a) LSEs would decrease their responsiveness when under high (vs. low) rival threat; and (b) HSEs would not decrease their responsiveness in the high (vs. low) threat condition and, if anything, would behave more responsively. I also predicted that state jealousy would mediate the relationship between threat condition and responsiveness for LSEs. Because LSEs are acutely sensitive to relationship threats and tend to self-protect when faced with threat (Murray, Rose, et al., 2002), I predicted that LSEs would feel more jealous in the

high (vs. low) threat condition, and higher levels of jealousy would be associated with less responsive behavior. For HSEs, jealousy may not mediate the condition-responsiveness link: Although I predicted that HSEs would feel at least somewhat more jealous in the high (vs. low) threat condition, their state jealousy may not predict responsiveness. If jealousy were to predict responsiveness for HSEs, this association should be a positive one. These predictions are consistent with the tendency documented in the risk regulation literature for HSEs to remain connected or even draw closer to their partners when they experience relationship threats (Cavallo et al., 2012).

## 2.0 Method

### 2.1 Participants

One-hundred and thirty-seven romantic couples ( $M$  participant age = 19.91 years;  $SD$  = 3.50;  $M$  relationship length = 17.41 months;  $SD$  = 33.95) participated in a 90 minute lab study, ostensibly examining couple's perceptions of social targets and their communication styles. One hundred twenty-seven couples were exclusively dating, four were married, and one was casually dating (i.e., each member was dating multiple people). Five dyads did not agree about their relationship status.<sup>1</sup> Participants identified as White (74.09%), Asian (15.69%), Black (4.38%), Hispanic (2.19%), Biracial (2.55%), and Other (1.09%). Most were in heterosexual relationships (96.35%). At least one member of each couple was an undergraduate student at the University of Pittsburgh who was recruited from the psychology department subject pool ( $n = 126$ ) or from flyers posted on campus ( $n = 11$ ). In appreciation of their participation, participants received course credit or remuneration ranging from \$10 - \$15.<sup>2</sup>

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<sup>1</sup> Participants' reports of their relationship status did not match for five dyads, such that (a) one member reported being married, whereas the other member reported exclusively dating his/her partner ( $n = 2$ ), (b) one member reported casually dating multiple people, whereas the other member reported exclusively dating his/her partner ( $n = 2$ ), and (c) one member reported being single, whereas the other member reported exclusively dating his/her partner ( $n = 1$ ).

<sup>2</sup> Couple members who were part of the subject pool received credit hours, and their partners received \$10. Couples recruited outside of the subject pool received \$30 (\$15 per couple member) in appreciation of their participation.

## 2.2 Overview

This study employed a 2 (rival threat condition: high vs. low) x continuous (target's trait self-esteem) between-groups design. Just prior to each couple's study appointment, one couple member was randomly assigned to the "target" of rival threat role (68 women, 69 men;  $M$  age = 19.74 years;  $SD$  = 3.46). The other couple member was, by default, assigned to the "partner" role (68 women, 69 men;  $M$  age = 19.87 years;  $SD$  = 3.66). Each participant completed a measure of trait self-esteem. Couples were then randomly assigned to a rival threat condition (high threat couple  $n$  = 69; low threat couple  $n$  = 68). Through subterfuge, the rival threat manipulation was intended to lead targets to believe that their partners found an ostensible "other participant" (rival) either particularly desirable (high threat condition) or less desirable (low threat condition). Targets then self-reported their feelings of state jealousy before being given a chance to respond to a sad event disclosure from their partners—a task that enabled the assessment of targets' responsiveness.

Throughout the lab session, both targets and partners completed series of questionnaires that included many measures (e.g., related to individual differences, features of their relationships, and participants' perceptions of their video messages). In the text sections that follow, I describe only those measures relevant to the hypotheses being tested in this Master's thesis. Additional measures that were administered but are not relevant to the hypotheses being tested in this thesis are listed in footnotes.

## 2.3 Procedure

### 2.3.1 Lab Session

Couples came to the lab, where a female experimenter obtained and documented informed consent with each couple in the observation room. The experimenter told couples that the study had two aims: (1) to investigate how couple members form impressions of social targets—specifically strangers—based on the ways by which they learn information about the social target; and (2) to examine communication styles in couples. To this end, couples were told that one member of the couple would learn about a stranger (purportedly another study participant) by viewing a written profile that he/she had created, and the other couple member would learn about the same stranger by meeting him/her in person. Both couple members would then rate the stranger on several dimensions. In reality, the stranger was a fictitious person who served as the romantic rival, and only targets rated the rival (“stranger”). For the portion of the study that examined communication styles, couples were told that they could be asked to create a video message for their partners and potentially for the stranger. In reality, both targets and partners were asked to create a video message for each other, but only targets were asked to create a video message for the stranger.

Couple members then individually sat at one of two desks, which faced opposite directions. Once seated back-to-back, the target and partner independently completed the same series of paper questionnaires. The main purpose of these questionnaires was to obtain a measure of the target’s self-esteem. Each participant completed the Rosenberg (1965) Self-Esteem Scale—a 10-item measure of trait self-esteem (e.g., “On the whole I am satisfied with myself” and “I take a positive attitude toward myself”; 1 = *very strongly disagree*; 9 = *very strongly agree*). Target self-esteem

scores ( $M = 6.99$ ;  $SD = 1.26$ ) were computed by averaging these ten items ( $\alpha = .87$ ), with appropriate items reverse-scored. A secondary purpose of these questionnaires was to ensure that participants met the eligibility requirement of being in a romantic relationship (participants who were single were not eligible for this study). To assess this, participants reported their relationship status: married, exclusively dating one person, dating two or more people, or single.<sup>3</sup>

Once both couple members completed this set of questionnaires, the experimenter proceeded to the rival threat manipulation. Adapting a procedure used by Murray and colleagues—who manipulated targets’ beliefs about their partners’ perceptions of their faults (Murray, Rose, et al., 2002) and their unique value as romantic partners (Murray et al., 2009)—I attempted to manipulate targets’ beliefs about their partners’ perceptions of the rival’s desirability as a romantic partner. To set the stage for the manipulation, couple members learned that they had been randomly assigned to the way in which they would learn about the stranger (in reality, one couple member had been randomly assigned to be the target of rival threat, thereby assigning the other member to be the partner). The experimenter explained that targets would read the stranger’s profile to learn about him/her, and partners would have a face-to-face interaction with the stranger. The experimenter then escorted the partner to another lab room, ostensibly to meet with the stranger. However, no such meeting occurred; instead, the partner learned that the stranger unexpectedly had to leave the lab for a moment. While the partner waited for the stranger to return, the

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<sup>3</sup> In addition to assessing each couple member's trait self-esteem and relationship status, these questionnaires also included questions about participants' demographic information (e.g., age, ethnicity), as well as measures of the Big Five personality traits, regulatory mode, perceived relationship quality, attachment anxiety and avoidance, and chronic emotional capital. These measures are not relevant to the hypotheses being tested in this thesis, so they will not be discussed further.

experimenter asked the partner to select and briefly write about a topic for the disclosure that he/she would make to the target in the later portion of the study that examined communication. The experimenter provided the partner with pen and paper to jot down his/her disclosure topic.

Meanwhile, the target was exposed to the rival—the stranger who was ostensibly meeting with the partner—by viewing his/her profile. The profile displayed an attractive, single, Caucasian person who was the same sex as the target. Apart from the photo provided and sex indicated on the profiles, the female and male profiles were identical (see Appendix for the rival profiles). Each profile included a full-body photo of a real undergraduate student, who had posed in a lab room and had volunteered his/her image for use in research studies. Prior to data collection, thirty undergraduate coders (23 women, 6 men, 1 unreported;  $M$  age = 21.50 years;  $SD$  = 1.91), drawn from two psychology labs, had rated a sample of 19 photos (12 male photos; 7 female photos) for physical attractiveness and age, with the restriction that coders did not rate photos of individuals who were members of their own labs. Coders rated the degree to which the person in each photo was physically attractive (1 = *not at all*; 9 = *extremely*), and estimated his/her age in years. Attractiveness scores were computed for each photo by averaging coders' ratings. I selected the most physically attractive male photo ( $M$  = 6.96;  $SD$  = 1.02) and female photo ( $M$  = 6.54;  $SD$  = 1.20) to display on the rival profiles. Twenty-five coders (19 women, 5 men, 1 unreported) had rated the selected male photo, and 13 coders (9 women, 3 men, 1 unreported) had rated the selected female photo.<sup>4</sup> On average, coders estimated that the most attractive male was 20.18 years old ( $SD$

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<sup>4</sup> More coders rated the male photo ( $n$  = 25) displayed on the rival profile than the female photo ( $n$  = 13) because the selected female photo displayed a person who was a member of the same lab as some of the coders. Thus, these coders did not rate her photo.

= 1.59), and that the most attractive female was 19.85 years old ( $SD = 1.28$ ). Dependent samples t-tests revealed that the male and female photos did not differ significantly from each other in physical attractiveness or estimated age,  $ts < 1$ .

After targets had viewed the rival profile for five minutes and the experimenter had collected the profile, partners rejoined targets in the observation room. A key component of the rival threat manipulation then occurred: The experimenter delivered identical envelopes to participants, which contained writing tasks designed to manipulate the target's perception that the partner found the rival more or less desirable as a potential romantic partner. To this end, both couple members completed ostensibly identical tasks while seated back-to-back, similar to the procedure used by Murray et al. (2002). In reality, the target's and partner's writing tasks differed.

Targets in both conditions received the following written instructions:

Please list qualities about the stranger that make him/her a desirable romantic partner. There is no need to write more than one appealing quality about the stranger, if that is all that comes to mind. Once you are finished, fold this piece of paper and put it back in its envelope.

Targets expected that their partners were completing this same writing task, but partners actually received different instructions, which varied depending on the couple's randomly assigned threat condition.<sup>5</sup> Partners in the low threat condition received instructions to list five items in their bedrooms/dorms, so that partners would quickly finish the task. In this way, targets should have had reason to believe that their partners found the rival relatively unattractive as a romantic partner. In contrast, partners in the high threat condition received instructions to list as many items in their

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<sup>5</sup> In order to randomly assign each couple to a rival threat condition, I ordered identical envelopes that contained the appropriate partner writing task, which the experimenter administered during the experiment. In this way, the experimenter remained blind to rival threat condition until the manipulation had already occurred.

bedrooms/dorms as they could recall (a minimum of 25 items was required), so that partners would spend a good deal of time on the task. Consequently, targets should have had reason to believe that their partners found the rival quite attractive. To ensure that targets noticed how long partners spent on the task, the task featured audible signals of the partners' progress: Participants wrote with pencils that scratched against their desks, and the task instructions prompted participants to fold and place their completed tasks back in their envelopes. The experimenter surreptitiously recorded the amount of time that participants spent writing, which served as the first manipulation check that partners in the high (vs. low) threat condition indeed wrote for a longer period of time. The experimenter ended the task either when both couple members finished the writing task or after five minutes had elapsed.

After the rival threat manipulation, partners were escorted back to the other lab room where they made a video-recorded disclosure for targets to later watch. Under the guise of a task examining couples' communication styles, partners were asked to talk about an emotionally upsetting event that they had experienced within the last year, which did not involve their relationships with the targets.<sup>6</sup>

While partners made their disclosures and responded to questionnaires, targets completed a series of computer-based questionnaires. The main objectives of administering these questionnaires were to obtain a measure of the targets' state jealousy—in order to examine its potential mediating role in subsequent analyses—and to collect two additional manipulation checks. Targets first rated the degree to which they felt "jealous" and "threatened" (1 = *very slightly*

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<sup>6</sup> After making their disclosures, partners responded to questions about their disclosure videos, their expectations about how responsive their partners (i.e., targets) would be, and their own state relationship quality.

or not at all; 5 = extremely). Ratings of "jealous" and "threatened,"  $r(135) = .54, p < .01$ , were averaged to create an index of state jealousy. Targets then estimated the number of desirable qualities that their partners listed about the rival during the writing task. Targets' estimates served as the second manipulation check that confirmed that targets in the high (vs. low) threat condition recognized that their partners listed more qualities about the rival. Targets also completed a 6-item measure ( $\alpha = .73$ ) of their beliefs about their partners' attitudes about the rival. For this measure, targets rated the degree to which they believed that their partners thought the rival possessed a variety of positive traits: smart, funny, attractive, interesting, likable, and extroverted (1 = *very strongly disagree*; 9 = *very strongly agree*). Responses were averaged across all six items to create a desirability composite, which served as a final manipulation check that ensured that targets in the high (vs. low) threat condition thought that their partners found the rival more desirable.<sup>7</sup>

Targets then watched their partners' video-recorded disclosures. Targets were surreptitiously video-recorded while they watched their partners' disclosures, in order to later assess targets' immediate, non-verbal responses to their partners' disclosures; however, this measure is beyond the scope of this thesis and will not be discussed further. Next, targets created a video-recorded response message for their partners (from which the main dependent variable, target responsiveness, was coded). To create the perception that their responses were of consequence, targets were told that their partners would see their response video-messages.

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<sup>7</sup> In addition to these items, participants responded to additional items that will not be discussed here: They reported the number of qualities they listed about the rival during the writing task, their impressions of the rival's positive attributes, and their current positive and negative affect.

However, responses were never shown to partners to avoid potential harm that partners might have incurred in the case that the experimental manipulation led some targets to behave unresponsively.

After targets created their response video-messages, they responded to an 11-item measure ( $\alpha = .85$ ) of their own responsiveness (“self-reported responsiveness”).<sup>8</sup> Targets responded to the self-reported responsiveness items (e.g., "How caring was your reply to your partner?" and "How much interest in your partner's disclosure did you express in your response message?") on a 9-point scale (1 = *not at all*; 9 = *extremely*). Self-reported responsiveness scores, which served as a secondary dependent variable, were computed by averaging responses to these items. Targets then engaged in an exploratory task: They introduced themselves to the rival via video-message and answered questions about their messages.<sup>9</sup> This task is not relevant to the hypotheses being tested in this thesis, but data obtained in this task will be coded for future investigations of targets’ behavioral responses to rivals.

Finally, partners rejoined targets in the observation room, and participants independently provided written answers to a series of questions that gauged their insights into the study's true purpose and suspicion about the study tasks or the rival. The experimenter then debriefed each couple, revealing all deception, and emphasizing the facts that the rival was fictitious and that partners did not actually write about the rival’s desirable qualities in the writing task. Following the debriefing, each couple member independently completed a relationship affirmation task,

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<sup>8</sup> In addition to reporting how responsive targets thought they were in their response videos, targets also reported their perceptions of their partners' disclosure videos on several dimensions (e.g., positivity, negativity) and rated their own state relationship quality.

<sup>9</sup> Targets responded to questions about their motives while creating their video-messages to the rival and about their own perceptions of the contents of the video message to the rival.

which involved selecting a value that they and their romantic partner shared (e.g., art, social life) and explaining why the chosen value was important to them (Lomore, Spencer, & Holmes, 2007). This task was intended to alleviate any negative feelings that the study tasks may have elicited.

### 2.3.2 Coding Phase

Three trained coders—blind to the study hypotheses, each couple’s rival threat condition, and each target’s self-esteem—independently rated each couple's set of video-recordings. Coders rated each couple’s set of disclosure and response videos before coding the next couple’s set of videos (i.e., coders rated each target’s response video immediately after rating his/her partner’s disclosure video). This enabled coders to better gauge responsiveness because they were aware of the disclosure content to which each target responded.

Because theory and research suggest that responsiveness varies as a function of features of the disclosure (e.g., Laurenceau, Barrett, & Pietromonaco, 1998; Reis and Shaver, 1988), coders rated features of partners’ disclosure videos on three dimensions: positivity, negativity, and expressivity. Controlling for these disclosure features is important because targets did not respond to the same disclosure. Using a scale that ranged from 1 (*not at all*) to 9 (*a great deal*), coders rated disclosure positivity (interrater  $\alpha = .83$ ; “How much positivity did the partner express in his/her message?”), and negativity (interrater  $\alpha = .75$ ; “How much negativity did the partner express in his/her message?”). Coders also rated disclosure expressivity with two items,  $r(125) = .68, p < .01$ : “How emotionally expressive was this message?” and “How open and self-revealing was this message?” (1 = *not at all*; 9 = *extremely*). These items were averaged across the three coders to create expressivity scores (interrater  $\alpha = .77$ ). Additionally, a fourth coder timed the duration of each disclosure video.

For targets' response videos, the same three coders—who also rated disclosure positivity, negativity, and expressivity—rated each video-message for responsiveness. Coders rated responsiveness with seven items—which parallel the self-reported responsiveness items that targets had completed—such as “How concerned does this person seem about his/her partner?” and “How interested does this person seem in his/her partner’s disclosure?” (1 = *not at all*; 9 = *extremely*). Coders’ ratings for this 7-item ( $\alpha = .90$ ) responsiveness measure (interrater  $\alpha = .84$ ) were averaged to compute a coder-rated responsiveness score for each target.<sup>10</sup>

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<sup>10</sup> For three couples, one coder knew either the partner or target displayed in the video-recordings. In these cases, disclosure feature and responsiveness ratings were computed by averaging the other two coders’ ratings.

### 3.0 Results

Data from nine couples were excluded from analyses (low threat condition  $n = 6$ ; high threat condition  $n = 3$ ): Five couples were excluded because targets expressed suspicion about the study hypotheses, two because targets expressed suspicion about the existence of the rival, one because a technical failure resulted in an excessive time lag between the manipulation and dependent variable measurement, and one because the target reported being single. Thus, the final sample comprised 128 couples (low threat  $n = 62$ ; high threat  $n = 66$ ). In addition, four response videos from the low threat condition and three response videos from the high threat condition are missing due to technical failure. Degrees of freedom vary throughout the analyses because some participants did not answer some questions.

Unless otherwise noted, I conducted linear regression analyses predicting each dependent variable from dummy-coded condition (0 = low threat; 1 = high threat) and mean-centered self-esteem (entered in Block 1), and their interaction (entered in Block 2).<sup>11</sup> Although this study involved couples as participants, regression analyses (vs. hierarchical linear modeling) are appropriate for testing the particular hypotheses presented in this thesis because I collected dependent variable measures from only one member of each couple—the target (Huta, 2014). However, in order to account for the influence that I expected the partner's (expressive) behavior to have on the target's (responsive) behavior—which constituted my main dependent variable—I

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<sup>11</sup> In addition to analyses reported here, I also ran analyses including gender and its two-way and three-way interactions with self-esteem and condition on each assessed outcome. Only one three-way interaction emerged, which is reported in a footnote. No other two-way or three-way interactions involving gender emerged.

planned to control for features of the partner's disclosure in my analyses examining partner responsiveness as an outcome. Although target self-esteem was a continuous measure, for ease of reporting, I refer to targets with relatively higher self-esteem scores as HSEs, and targets with relatively lower self-esteem scores as LSEs.

### 3.1 Manipulation Checks

Before testing the main hypotheses, I examined each manipulation check to ensure that targets in the high (vs. low) threat condition thought that their partners found the rival more appealing. Although I anticipated main effects of rival threat condition on each manipulation check, I ran models including condition, self-esteem, and their interaction to ensure that these interactions did not unexpectedly emerge.

The first manipulation check—the duration of time partners wrote during the writing task—indicated whether partners enacted the behavior that the manipulation was intended to affect. As expected, the aforementioned regression revealed a strong main effect of condition: Partners in the high threat condition wrote for a longer period of time (estimated  $M = 247.27$  seconds;  $SE = 5.19$ ) than partners in the low threat condition (estimated  $M = 63.00$  seconds;  $SE = 5.35$ ),  $\beta = .91$ ,  $t(125) = 24.70$ ,  $p < .001$ ,  $d = 4.42$ . Neither a main effect of self-esteem, nor the Condition X Self-Esteem interaction emerged,  $ts < 1.62$ .

The second manipulation check indicated whether targets perceived that their partners wrote few versus many items during the writing task. Similar to the first manipulation check, the anticipated main effect of condition emerged: Targets in the high threat condition estimated that their partners listed more qualities about the rival (estimated  $M = 6.67$ ;  $SE = 0.35$ ) than did targets

in the low threat condition (estimated  $M = 3.32$ ;  $SE = 0.35$ ),  $\beta = .53$ ,  $t(118) = 6.83$ ,  $p < .001$ ,  $d = 1.26$ . Again, no effects of self-esteem or the Condition X Self-Esteem interaction emerged,  $ts < 1.52$ .

The final manipulation check indicated whether the rival threat manipulation shaped targets' beliefs about partners' perceptions of the rival's desirability. I expected that targets in the high threat condition would report thinking that their partners found the rival more desirable than would targets in the low threat condition. I ran the usual regression model to predict the desirability composite, which was computed by averaging 6 items that asked targets to estimate how their partners would rate the rival on a variety of positive dimensions (e.g., smart, attractive). Unexpectedly, the regression revealed no main effect of condition on this variable,  $t < 1.16$ . Neither the main effect of self-esteem nor the Condition X Self-Esteem interaction emerged as significant predictors of the desirability composite,  $ts < 1$ .<sup>12</sup>

It is possible that the regression predicting the desirability composite failed to show the anticipated effects because the composite included traits (e.g., extroverted) that targets may not have seen as central to romantic desirability. To explore this possibility, I examined correlations

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<sup>12</sup> In an analysis that included gender and its interactions with self-esteem and condition, an unexpected main effect of gender emerged on the desirability composite: Female targets reported believing that their partners found the rival more desirable (estimated  $M = 6.98$ ;  $SE = .11$ ) than male targets (estimated  $M = 6.48$ ;  $SE = .11$ ),  $\beta = .27$ ,  $t(125) = 3.13$ ,  $p = .002$ ,  $d = 0.56$ . Because two different photos were used in this study (one of a male that male targets received, and one of a female that female targets received), this finding may suggest that participants found the female profile more desirable than the male profile. Alternatively, or in addition, it is possible that female targets perceived that their partners found the rival more desirable, compared to male targets. No two-way or three-way interactions with gender emerged on the desirability composite.

between the first two manipulation checks, the desirability composite, and each item from the desirability composite, which are reported in Table 1. As intended, the length of time that partners wrote during the writing task was positively associated with targets' estimates of the number of qualities partners listed about the rival, but only one desirability composite item was associated with both of these manipulation checks: targets' beliefs about their partners' perceptions of rival attractiveness. A regression predicting the attractiveness item from condition, target self-esteem, and their interaction revealed no main effect of self-esteem and no Condition X Self-Esteem interaction,  $t_s < 1.45$ . For the predicted condition effect, the pattern of means was in the predicted direction (high threat condition estimated  $M = 6.08$ ,  $SE = .22$ ; low threat condition estimated  $M = 5.55$ ,  $SE = .23$ ), but the difference between conditions was not significant,  $\beta = .15$ ,  $t(124) = 1.67$ ,  $p = .097$ ,  $d = 0.30$ .<sup>13</sup>

Taken together, these manipulation check analyses suggest that although the manipulation successfully affected partners' behavior (i.e., how long partners spent writing) and targets' perceptions of the number of the rival's desirable qualities their partners described in the ways that I had anticipated, the manipulation may not have altered a key perception: targets' beliefs about

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<sup>13</sup> An unexpected three-way interaction with gender, self-esteem, and condition emerged on the attractiveness item of the desirability composite,  $\beta = -.34$ ,  $t(119) = -1.91$ ,  $p = .058$ ,  $d = 0.35$ . The two-way Condition X Gender interaction was marginally significant for LSEs (-1  $SD$ ),  $\beta = .37$ ,  $t(119) = -1.70$ ,  $p = .09$ ,  $d = 0.31$ , but not for HSEs (-1  $SD$ ),  $t < 1.04$ . In the high threat condition, LSE women thought that their partners found the rival more attractive than LSE men,  $\beta = .39$ ,  $t(119) = 2.25$ ,  $p = .03$ ,  $d = 0.41$ . However, in the low threat condition, LSE targets' beliefs about how attractive their partners found the rival did not vary with gender,  $t < 1$ . LSE women thought that their partners found the rival somewhat more attractive in the high (vs. low) threat condition,  $\beta = .30$ ,  $t(119) = 1.84$ ,  $p = .07$ ,  $d = 0.34$ . In contrast, no simple effect of condition emerged for LSE men,  $t < 1$ .

how desirable their partners found the rival. The lack of a condition effect on the overall perceived general desirability of the rival and the marginally significant effect of condition on targets' perceptions about how attractive their partners found the rival each suggest that the manipulation likely did not provide as strong of a manipulation of rival threat as I had intended.

### 3.2 State Jealousy

I proceeded to examine targets' affective response to rival threat: jealousy. Although for the earlier manipulation checks, I predicted main effects of condition, I expected that target self-esteem might moderate condition effects on jealousy. Specifically, I predicted that LSEs would feel more jealous in the high (vs. low) threat condition, whereas HSEs' jealousy levels would be less affected by condition. State jealousy composite scores ( $M = 1.30$ ;  $SD = 0.63$ ) demonstrated problematic right skew (skewness = 3.20;  $SE = .22$ ), with 68% of scores at the low end-point of the scale. Additionally, state jealousy residuals were markedly heteroskedastic, thereby violating the linear regression assumption of homoscedasticity. No transformation—including the logarithmic, square-root, and reciprocal transformations—would correct for the observed heteroskedastic residuals, rendering analyses using linear regression inappropriate. Although methodologists typically advise against dichotomizing outcome variables when the outcome is normally distributed and its residuals are homoscedastic—dichotomizing the dependent variable in these cases results in a loss information and decreased power (cf. Taylor, West, & Aiken, 2006)—others have suggested that this procedure is acceptable when transformations will not remedy extreme skew (e.g., Steiner, 2002). Thus, I dichotomized jealousy scores, coding targets who reported no jealousy (jealousy composite score = 1;  $n = 87$ ) as "0," and targets who reported

some jealousy (jealousy composite scores  $\geq 1.5$ ;  $n = 40$ ) as "1." In order to accommodate the dichotomous jealousy scores, I conducted a hierarchical logistic regression predicting jealousy (0 = no jealousy; 1 = some jealousy) from condition and self-esteem (entered in Block 1), and their interaction (entered in Block 2).

I hypothesized that LSEs in the high threat condition would be more likely to report some jealousy, relative to LSEs in the low threat condition, whereas the likelihood of reporting some jealousy would be more similar among HSEs in the high threat condition and HSEs in the low threat condition. As expected, a Condition X Self-Esteem interaction emerged in Block 2, logistic  $B = -0.87$ ,  $SE = .36$ ,  $p = .02$ , odds ratio (OR) = 0.42, 95% CI = [0.21, 0.85],  $\chi^2(1) = 6.37$ ,  $p = .01$ , Nagelkerke  $R = .18$ . In the high threat condition, the odds of reporting some jealousy were higher for LSEs than for HSEs: Reporting some jealousy was 2.86 times less likely for every point increase on the 9-point trait self-esteem scale, logistic  $B = -1.04$ ,  $SE = .29$ ,  $p < .001$ , OR = 0.35, 95% CI [0.20, 0.63]. In the low threat condition, self-esteem did not predict the odds of reporting some jealousy, logistic  $B = -.17$ ,  $SE = .21$ ,  $p = .41$ , OR = .84. Additionally, LSEs ( $-1 SD$ ) were 2.8 times more likely to report some jealousy in the high threat condition, relative to the low threat condition, logistic  $B = 1.03$ ,  $SE = .55$ ,  $p = .06$ , OR = 2.80, 95% CI [0.96, 8.18]. However, the wide confidence interval suggests that the reported odds ratio is a relatively imprecise estimate. In contrast, the condition effect for HSEs ( $+1 SD$ ) was not significant, and, if anything, appeared to follow the opposite pattern: HSEs were about three times less likely to report some jealousy in the high (vs. low) threat condition, logistic  $B = -1.14$ ,  $SE = .69$ ,  $p = .097$ , OR = 0.32, 95% CI [0.08, 1.23]. Figure 1 displays this pattern of results.

Additionally, an examination of Block 1 revealed that although condition was not a significant predictor of jealousy, logistic  $B = 0.16$ ,  $SE = .40$ ,  $p = .69$ , OR = 1.17, 95% CI [0.53,

2.58], self-esteem was a significant predictor of jealousy, logistic  $B = -0.53$ ,  $SE = .17$ ,  $p = .002$ ,  $OR = 0.59$ ,  $95\% CI = [0.43, 0.82]$ ,  $\chi^2(2) = 11.47$ ,  $p = .003$ , Nagelkerke  $R = .12$ . Specifically, targets were 1.69 times less likely to report some jealousy for every one point increase in self-esteem. Although the jealousy measure was meant to capture state jealousy, the self-esteem difference observed on this measure may reflect the general emotional tendencies associated with self-esteem; LSEs tend to experience more negative emotions, including jealousy, compared to HSEs (MacDonald & Leary, 2012).

Findings thus far suggest that although the rival threat manipulation affected some manipulation checks as I had expected, its effects were less clear on others: No effects emerged on the desirability composite, and condition only marginally affected how attractive targets thought their partners found the rival. Additionally, although self-esteem did moderate a condition effect on jealousy in the hypothesized way, this analysis required dichotomized jealousy scores because most targets reported extremely low levels state jealousy. Accordingly, the rival threat manipulation likely did not put targets in the psychological state that I had intended, which may provide a weak test of the main hypotheses regarding the effects of rival threat—and the resulting jealousy—on responsiveness. Nevertheless, I proceeded to test my main hypotheses involving the responsiveness outcomes.

### **3.3 Disclosure Video Content**

Although my main interest was in target responsiveness, because targets did not respond to identical disclosures, I first examined coder-rated dimensions of the partners' disclosure videos: positivity, negativity, expressivity, and duration. In the disclosure videos, partners discussed a

variety of topics, such as academic setbacks (e.g., failing a course), interpersonal conflict (e.g., arguments and strained relationships with family and friends), and concerns about their loved ones (e.g., a grandfather's Alzheimer's and a brother's life-threatening car accident).

On average, partners spoke for approximately three minutes in their disclosure videos ( $M = 186.42$  seconds;  $SD = 77.42$ ). Coders rated these videos as relatively high in negativity ( $M = 6.05$ ;  $SD = 1.18$ ) and expressivity ( $M = 5.99$ ;  $SD = 1.37$ ); both of these features were higher than the mid-points of their scales (for negativity:  $t(120) = 14.47$ ,  $p < .001$ ; for expressivity:  $t(120) = 11.98$ ,  $p < .001$ ). Interestingly, coder-rated positivity ( $M = 3.55$ ;  $SD = 1.83$ ) was higher than one might expect, given that the disclosure topics were intended to—and did—have a negative focus. Nonetheless, disclosure positivity was still lower than the mid-point of its scale,  $t(120) = -5.71$ ,  $p < .001$ . Before controlling for these features in the main analyses, I examined whether any of these features varied as a function of target self-esteem, condition, or their interaction to ensure that no such effects unexpectedly emerged. Separate linear regression analyses revealed no main effects and no interactions on any of the disclosure features,  $t_s < 1.32$ .

### 3.4 Responsiveness

Next, I tested the prediction that self-esteem and condition would interact to predict each responsiveness variable—coder-rated responsiveness and self-reported responsiveness. Because targets were responding to different disclosures, I planned to control for coders' ratings of disclosure positivity, negativity, expressivity, and the duration of the partner's disclosure video in these analyses predicting responsiveness. I conducted preliminary regression analyses to ensure that no unexpected two-way or three-way interactions with any of the disclosure features,

condition, and self-esteem emerged on either coder-rated responsiveness or self-reported responsiveness.<sup>14</sup> One two-way interaction did unexpectedly emerge on each responsiveness variable: a Condition X Positivity interaction (for coder-rated responsiveness:  $\beta = .31$ ,  $t(114) = 2.43$ ,  $p = .02$ ,  $d = 0.46$ ; for self-reported responsiveness:  $\beta = .37$ ,  $t(114) = 2.91$ ,  $p = .004$ ,  $d = 0.55$ ). Therefore, I retained the Condition X Positivity interaction in the main analyses. The nature of these Condition x Positivity interactions is described in relevant sections below. No other two-way or three-way interactions with the disclosure features emerged,  $ts < 1.61$ . Accordingly, regression models that separately predicted each responsiveness outcome (coder-rated and self-reported) included coder-rated disclosure positivity, negativity, expressivity, and duration as covariates in Block 1, condition and self-esteem—the main effect predictors relevant to my main hypotheses—in Block 2, and the Condition X Self-Esteem and Condition X Positivity interaction terms in Block 3.<sup>15</sup>

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<sup>14</sup> I ran separate regression models for each disclosure feature because a regression model that simultaneously estimated all main effects and interactions with disclosure positivity, negativity, expressivity, duration, self-esteem, and condition would be underpowered.

<sup>15</sup> For the sake of parsimony, in these analyses I excluded the non-significant Self-Esteem X Positivity interaction, which was originally included in the preliminary regression analyses predicting each responsiveness variable from positivity, self-esteem, condition, and their two-way and three-way interactions. However, the reported pattern of results remains unchanged in analyses that include the non-significant Self-Esteem X Positivity interaction for each responsiveness variable.

### 3.4.1 Coder-Rated Responsiveness

I predicted that rival threat would affect targets' responsiveness differently for LSEs and HSEs: LSEs would behave less responsively under high (vs. low) threat, whereas HSEs would behave just as, if not more, responsively under high (vs. low) threat. Regression analyses did not support this prediction: No Condition X Self-Esteem interaction emerged,  $t < 1.02$ . Similarly, no main effects of condition or self-esteem emerged,  $ts < 1$ . Analyses, however, did reveal a main effect of coder-rated positivity: Targets behaved more responsively when their partners expressed more (vs. less) positivity in their disclosure videos,  $\beta = .31$ ,  $t(116) = 3.05$ ,  $p = .003$ ,  $d = 0.57$ . No other main effects of the disclosure features emerged on coder-rated responsiveness,  $ts < 1.42$ .

An unexpected Condition X Positivity interaction also emerged,  $\beta = .27$ ,  $t(112) = 2.18$ ,  $p = .03$ ,  $d = 0.41$  (see Figure 2). Simple effects analyses revealed that in the high threat condition, targets who received disclosures in which their partners expressed less positivity (as rated by coders) behaved less responsively than did targets who received more positive disclosures,  $\beta = .47$ ,  $t(112) = 3.69$ ,  $p < .001$ ,  $d = 0.70$ . In the low threat condition, however, disclosure positivity did not predict coder-rated responsiveness,  $t < 1$ . Among targets who received less positive disclosures ( $-1 SD$ ), targets in the high threat condition behaved less responsively than did targets in the low threat condition,  $\beta = -.25$ ,  $t(112) = -2.13$ ,  $p = .04$ ,  $d = 0.40$ . In contrast, among targets who received more positive disclosures ( $+1 SD$ ), coder-rated responsiveness did not depend on threat condition,  $t < 1$ . I return to this finding in the Discussion.

### 3.4.2 Self-Reported Responsiveness

The regression analysis on self-reported responsiveness did not reveal the predicted Condition X Self-Esteem interaction,  $t < 1$ , nor did it reveal main effects of condition or self-esteem,  $ts < 1.30$ . Yet, parallel to findings for coder-rated responsiveness, a main effect of positivity did emerge: Targets evaluated their behavior as more responsive when their partners expressed more positivity in their disclosures,  $\beta = .30$ ,  $t(116) = 2.87$ ,  $p = .01$ ,  $d = 0.53$ . No main effects of disclosure negativity, expressivity, or duration emerged,  $ts < 1.02$ .

Also similar to the regression for coder-rated responsiveness, an unexpected Condition X Positivity interaction emerged on self-reported responsiveness,  $\beta = .35$ ,  $t(112) = 2.78$ ,  $p = .01$ ,  $d = 0.53$  (see Figure 3). Simple effects analyses revealed that more disclosure positivity (as rated by coders) predicted more self-reported responsiveness for targets in the high threat condition,  $\beta = .52$ ,  $t(112) = 4.08$ ,  $p < .001$ ,  $d = 0.77$ , but disclosure positivity did not predict self-reported responsiveness for targets in the low threat condition,  $t < 1$ . Among targets who received less positive disclosures ( $-1 SD$ ), targets in the high (vs. low) threat condition reported behaving less responsively,  $\beta = -.34$ ,  $t(112) = -2.91$ ,  $p = .004$ ,  $d = 0.55$ . In contrast, among targets who received more positive disclosures ( $+1 SD$ ), self-reported responsiveness did not vary as a function of threat condition,  $t < 1.09$ .

### 3.5 Jealousy Predicting Responsiveness

Although the predicted Condition X Self-Esteem interaction did not emerge on either responsiveness measure, I proceeded to test the hypothesis that the experience of jealousy would

be negatively associated with responsiveness for LSEs, but that jealousy would be positively (if at all) associated with responsiveness for HSEs. Analyses testing this hypothesis used the dichotomized jealousy variable, which was initially created because of the previously described issues involving the distribution of jealousy scores. I first conducted two sets (one for coder-rated responsiveness and one for self-reported responsiveness) of four regression analyses that each included one disclosure feature, jealousy, and self-esteem, and their two- and three-way interactions to ensure that no interactions involving any disclosure feature unexpectedly emerged. No such interactions emerged on coder-rated responsiveness,  $t_s < 1.76$ . Accordingly, only main effects of the disclosure features and condition were included as covariates in the main analysis for coder-rated responsiveness. The preliminary analyses predicting self-reported responsiveness, however, unexpectedly revealed a Jealousy X Positivity interaction,  $\beta = -.23$ ,  $t(112) = -1.98$ ,  $p = .05$   $d = 0.37$ , and a Self-Esteem X Positivity interaction,  $\beta = -.25$ ,  $t(112) = -2.63$ ,  $p = .01$   $d = 0.50$ . These interactions are described shortly. No other interactions emerged,  $t_s < 1.08$ . Therefore, in addition to controlling for main effects of disclosure positivity, negativity, expressivity, and duration, and condition, the self-reported responsiveness model also included Jealousy X Positivity and Self-Esteem X Positivity interaction terms.

### **3.5.1 Coder-rated Responsiveness**

Jealousy and self-esteem did not interact to predict coder-rated responsiveness ( $t < 1$ ) and no main effects of jealousy or self-esteem emerged,  $t_s < 1.14$ . However, the analysis revealed the previously-observed main effect of disclosure positivity, such that more disclosure positivity predicted more coder-rated responsiveness,  $\beta = .30$ ,  $t(114) = 2.96$ ,  $p = .004$ ,  $d = 0.55$ . No other main effects of the disclosure negativity, expressivity, duration, or condition emerged,  $t_s < 1.44$ .

### 3.5.2 Self-reported Responsiveness

The Jealousy X Self-Esteem interaction did not emerge,  $t < 1$ . In addition, neither a main effect of jealousy, nor a main effect of self-esteem emerged,  $t_s < 1$ . Once again, only the previously-reported main effect of disclosure positivity emerged: Targets reported behaving more responsively to disclosures higher (vs. lower) in coder-rated positivity,  $\beta = .29$ ,  $t(114) = 2.81$ ,  $p = .01$ ,  $d = 0.53$ . No other main effects of the disclosure features or condition emerged,  $t_s < 1.37$ .

Unexpectedly, this analysis also revealed a Jealousy X Positivity interaction (see Figure 4),  $\beta = -.24$ ,  $t(109) = -2.07$ ,  $p = .04$ ,  $d = 0.40$ . Simple effects analyses revealed that although disclosure positivity did not predict self-reported responsiveness for targets who reported some jealousy,  $t < 1$ , more positive disclosures did predict more self-reported responsiveness for targets who reported no jealousy,  $\beta = .42$ ,  $t(109) = 3.64$ ,  $p < .001$ ,  $d = 0.70$ . Moreover, experiencing some (vs. no) jealousy was marginally associated with less self-reported responsiveness for targets who received more positive disclosures (+1 *SD*),  $\beta = -.27$ ,  $t(109) = -1.76$ ,  $p = .08$ ,  $d = 0.34$ , but experiencing jealousy (versus not) was not associated with self-reported responsiveness for targets who received less positive disclosures (-1 *SD*),  $t < 1.15$ .

Finally, an unexpected Self-Esteem x Positivity interaction emerged,  $\beta = -.22$ ,  $t(109) = -2.32$ ,  $p = .02$ ,  $d = 0.44$ . For LSEs (-1 *SD*), more disclosure positivity predicted more self-reported responsiveness,  $\beta = .64$ ,  $t(109) = 3.82$ ,  $p < .001$ ,  $d = 0.73$ . For HSEs (+1 *SD*), in contrast, disclosure positivity was not associated with self-reported responsiveness,  $t < 1.53$ . Additionally, for targets who received less positive disclosures (-1 *SD*), self-esteem was positively associated with self-reported responsiveness,  $\beta = .35$ ,  $t(109) = 2.32$ ,  $p = .02$ ,  $d = 0.44$ . In contrast, for targets who received disclosures in which their partners expressed more positivity (+1 *SD*), self-esteem did not predict self-reported responsiveness,  $t < 1$ . Figure 5 displays this pattern of results.

## 4.0 Discussion

Existing taxonomies of responses to rival threat suggest that rival threat can lead people to enact a variety of behaviors, some of which are likely to be relationship-promoting and others that may be harmful to relationships. Yet, the vast majority of research examining these responses has focused on behaviors that, according to some theorists (e.g., Shackelford & Buss, 1997), may corrode relationships. Much of this past work is also limited because of the reliance on retrospective reports of responses or responses to hypothetical scenarios of rival threat and/or jealousy, which may not accurately reflect how people behaviorally respond to authentic experiences of rival threat and rival-threat-induced jealousy. The present study investigated how targets of rival threat regulate their responsiveness—one type of relationship-promoting behavior—to their partners' disclosures during an authentic experience of rival threat and examined the potential moderating role of targets' trait level of self-esteem. I expected that: (1) LSEs would self-protectively decrease their responsiveness, whereas HSEs would maintain, or potentially increase, their responsiveness when under high (vs. low) rival threat, and (2) state jealousy would mediate a condition effect on responsiveness for LSEs, but not for HSEs. The results of this study did not support these hypotheses: LSEs and HSEs did *not* differentially regulate their responsiveness to their partners when confronted with rival threat, and state jealousy was *not* associated with responsiveness—even when considering self-esteem as a potential moderator.

Analyses involving the manipulation checks in this study provide some insight into why the predicted effects did not emerge. The first two manipulation checks—the duration of time partners wrote during the writing task and targets' estimates of the number of qualities that their

partners listed during the writing task—showed condition differences, suggesting that the rival threat manipulation had some of its intended effects. However, the failed third manipulation check (how desirable targets thought their partners found the rival) raises questions about the effectiveness of the manipulation. Yet, as expected, LSEs were more likely to report experiencing some jealousy in the high (vs. low) threat condition, whereas the likelihood of HSEs' reports of jealousy did not depend on threat condition. These findings are consistent the past risk regulation research that suggests that LSEs have more sensitive emotional systems that detect potential relationship threats, feeling hurt more readily when they encounter such threat, than HSEs (Murray et al., 2006). However, it is noteworthy that the mean score from the continuous jealousy measure was surprisingly low ( $M = 1.30$  on a 5-point scale), with nearly 70% of targets reporting feeling not at all jealous. Given that jealousy ensues from perceived threat and that the strength of jealousy affects behavioral responses to such threat (White, 1981), the extremely low levels of jealousy observed in this study may reflect a weak rival threat manipulation; as a result, although LSEs did show a condition difference in jealousy in this study, the rival threat manipulation and resulting jealousy may not have been potent enough to affect targets' responsiveness. Therefore, future work that uses a more potent rival threat manipulation (i.e., one that elicits higher levels of jealousy) is needed to fairly test the hypotheses that I set out to test.

Failure to find a condition difference on the third manipulation check may offer insight into why the rival threat manipulation was weaker than intended. It is possible that threat condition did not affect targets' beliefs about how desirable their partners found the rival because targets in the high threat condition generated benign explanations for their partners' lengthy lists, which were ostensibly about the rival's appealing qualities. For example, targets may have interpreted their partners' lengthy lists as evidence of their partners' virtue (e.g., their partners see the best in

everyone). Relatedly, targets may have reasoned that their partners thought that the rival would be a desirable partner for some people, but that the rival would not be a suitable partner for them (the partner) personally. Because individuals tend to feel confident in the accuracy of their perceptions of their partners' romantic lives (e.g., sexual histories) and general preferences (e.g., for activities; Swann & Gill, 1997), some targets may have decided that the rival displayed in the profile did not match their partners' idiosyncratic partner preferences— which indeed uniquely predict individuals' attraction to specific other people (Back, Schmukle, & Egloff, 2011; Eastwick & Hunt, 2014). In this way, providing targets with details about the rival (e.g., physical appearance and interests) may have tempered the potency of the rival threat manipulation among targets who thought that the rival did not embody their partners' "type."

Researchers interested in using a similar manipulation might consider addressing these potential shortcomings of the rival threat manipulation in a number of ways. To limit targets' benevolent attributions for their partners' lengthy lists, researchers could alter the writing task prompt that targets receive, so that targets believe that their partners' lists are more diagnostic of their partners' personal attraction to a given rival. For example, targets may receive a sheet of paper with a set of two instructions—one ostensibly for their partners and one for them—that first describes a more threatening version of the partner's writing task (e.g., list the stranger's desirable qualities that make him/her a more appealing romantic partner, compared to your other past and current romantic partners) and then describes different instructions for targets (e.g., list the qualities that people generally look for in romantic partners). Researchers might also consider providing targets with only basic information about the rival (e.g., the gender of the rival) to avoid inadvertently giving some targets reason to disqualify the rival as a person to whom their partners would find desirable personally. Finally, giving targets reason to believe that the rival reciprocates

their partners' interest would likely also strengthen this manipulation, as one rival threat manipulation that has been shown to induce feelings of jealousy involved mutual flirtation between a partner and rival (Slotter et al., 2013).

In addition to the potential issues related to the rival threat manipulation, lack of support for my hypotheses may stem from the particular way in which I operationalized responsiveness. Although coding responsive behavior in a support-type setting is a common way to assess responsiveness (e.g., Collins & Feeney, 2000; Forest, Kille, Wood, & Holmes, 2014; Lemay & Neal, 2013; Maisel & Gable, 2009), it is possible that features of my procedure contributed to the null findings. Given that I examined responsiveness through targets' behavioral responses to their partners' videotaped negative disclosures, it is possible that rival threat did not affect responsiveness because targets were reluctant to deprive their partners of responsiveness in a context in which their partners discussed an upsetting event and expressed relatively high levels of negativity—regardless of targets' experiences of rival threat.

In contrast, assessing responsiveness in a different context—such as when partners attempt to capitalize with targets or disclose about neutral events—or operationalizing responsiveness in terms of targets' willingness to meet partners' needs in other domains (e.g., to facilitate their goal pursuits; Feeney, 2004; Fitzsimons, Finkel, & vanDellen, 2015) may have yielded different results than those reported here. In a similar vein, the reported findings involve targets' responsiveness after targets had some time to digest their partners' disclosures and perhaps regulate their responsiveness (i.e., targets did not respond in real-time to their partners' disclosures). Findings may differ, however, if one examined responsive behavior when targets are not afforded this opportunity. For example, effects of rival threat on responsiveness-related constructs may be observable in targets' immediate, nonverbal behavior while they listen to their partners' disclosures

(e.g., closely attending to the disclosure; rolling their eyes). Perhaps targets would be less able to regulate their relationship-promoting behavior in the moment, given previous work that suggests that people are less able to regulate their relationship-destructive responses to provocations (e.g., intentions to aggress against the partner in response to a hypothetical rival threat) when they are instructed to respond immediately (vs. after a time delay; Finkel, DeWall, Slotter, Oaten, & Foshee, 2009). Of course, targets may also be less motivated to regulate themselves when they do not believe that their reactions are being observed by their partner or anyone else. Because I surreptitiously recorded targets while they watched their partners' disclosures, a future direction that I am interested in pursuing is to conduct additional coding of these surreptitious videos and to examine whether rival threat affected behavior in this context.

In spite of these limitations, the present study had several strengths. By coding targets' responses to partners' disclosures, I answered Baumeister, Vohs, and Funder's (2007) call to social psychological researchers to employ behavioral dependent measures. Moreover, the present paradigm employed an ethical method of capturing one type of behavioral response to rival threat—targets' communication with their partners—which, as Harris and Darby (2010) noted, has been a barrier for researchers interested in measuring the behavioral effects of rival threat and the jealousy that it produces. Video-recording couple members' messages to each other separately and withholding targets' messages from partners allows researchers to measure targets' behavior directed at their partners, while limiting the potentially harmful effects that the rival threat manipulation may have for some couples if couples were asked to interact face-to-face after the manipulation. In a similar vein, the rival threat manipulation attempted here offers a promising method of manipulating an authentic experience of rival threat in ongoing couples, which other researchers may adapt for their own research related to rival threat.

#### 4.1 Unexpected Findings and Future Directions

Although I likely did not manipulate rival threat to the degree that I had intended, a few interesting—albeit unexpected—findings did emerge. First, partners' expressions of positivity (as rated by coders) in their negative disclosure video was positively associated with coder-rated and targets' self-reported partner responsiveness—at least in the high threat condition. This finding is particularly interesting because the disclosures were intended to, and did, focus on a negative event. In such negative disclosure contexts, one might expect that disclosers who expressed more negativity (e.g., distress)—not positivity—would elicit more responsiveness from their partners. However, these findings are consistent with some past work examining the potential benefits of expressing positivity during negative disclosures. For example, Monin, Martire, Schulz, & Clark (2009) found that spousal caregivers of partners with chronic pain tended to respond to their partners' experiences related to their pain in ways that tried to help their partners feel better (e.g., by being less likely to express doubts that their partners' pain would improve) when their partners reported being more (vs. less) willing to express happiness in daily life. Relatedly, some other work has demonstrated that recently-bereaved adults' more (vs. less) intense expressions of positivity (i.e., laughter and smiles) during interviews about their late partners increased positive emotion and decreased negative emotion in observers, and predicted better social adjustment and social connection for the bereaved adults (Keltner & Bonanno, 1997; Papa & Bonanno, 2008).

However, in the present study, expressions of positivity were only associated with partner responsiveness in the high threat condition (not in the low threat condition). Given that the rival threat condition did not have strong effects on how desirable targets thought that their partners found the rival or on targets' jealousy, it is unclear why this effect of disclosure positivity emerged only in the high threat condition. However, these findings raise the possibility that expressing

positivity during discussion of a negative event can garner responsiveness from responders, at least under some circumstances (a causal account). Alternatively, this finding may reflect that targets who tend to be more responsive also tend to have partners who typically express more positivity. As a first step in exploring this possibility, I conducted a series of analyses that predicted responsiveness (coder-rated and self-report) from threat condition, target self-esteem, disclosure features (positivity, negativity, expressivity, and duration), and the Condition X Positivity interaction, while (one at a time) controlling for a feature of the disclosing partner that might be related to both positive expressivity and partner responsiveness: self-esteem, relationship satisfaction, and attachment anxiety and avoidance. Disclosure positivity continued to predict responsiveness in the high threat condition when such variables were controlled. This provides some preliminary evidence that the observed association may indeed be related to the features of the disclosure itself rather than due to features of the person making the disclosure. However, experimental work is needed to provide convincing evidence for a causal relation.

If experimental work reveals that expressing positivity in negative disclosure contexts does increase partner responsiveness, future research might also examine mechanisms through which it does so. For example, expressing positivity may increase the responder's responsiveness by making the responder's experience listening to the negative disclosure more pleasant, preventing the responder's mood from worsening, or making the responder feel optimistic about the effectiveness of his/her support provision attempts. Additionally, future research might examine the specific types of positivity that promote responsiveness, such as expressions of gratitude, trying to find a silver lining to the negative event, or affiliative nonverbal behavior (e.g., laughter).

Findings from analyses that examined the associations between targets' jealousy and self-reported responsiveness also provided some evidence that expressing positivity predicts more

partner (self-reported) responsiveness, but only (1) under some conditions or (2) for some responders. First, disclosure positivity predicted self-reported responsiveness for targets who reported experiencing no jealousy (but not for targets who reported some jealousy). Given that disclosure positivity was associated with responsiveness only in the high threat condition, one might expect that disclosure positivity would be associated for targets who reported experiencing some jealousy—but not for targets who reported no jealousy; yet this finding follows the opposite pattern. Second, disclosure positivity predicted self-reported responsiveness for LSEs (but not for HSEs). Taken together, these two interaction patterns are surprising: LSEs tend to experience more jealousy than HSEs in general (MacDonald & Leary, 2012)—and were more likely to report some jealousy in this sample—yet the associations between disclosure positivity and self-reported responsiveness were different for LSEs and targets experiencing some (versus no) jealousy. Additionally, these findings are intriguing because unlike targets, coders did *not* see a difference in responsiveness—depending on disclosure positivity or otherwise—between targets who reported some jealousy and targets who reported no jealousy, or between LSE and HSE targets.

It is possible that the interaction between jealousy and disclosure positivity reflects that expressing positivity is typically associated with responders' (targets') more favorable perceptions of their responsiveness, but that experiencing any jealousy eliminates this association. The finding that disclosure positivity was only associated with self-reported responsiveness for LSEs (and not for HSEs) may suggest that LSEs' favorable perceptions of their responsiveness can be bolstered by their partners' positive expressions, whereas HSEs typically have favorable perceptions of their responsiveness, regardless of their partner's positive expressivity. However, because both of these interaction findings were correlational and were not predicted, future research is needed to test whether they replicate before drawing conclusions about the nature of these interaction patterns.

## 4.2 Conclusions

A major aim of the present study was to examine how rival threat might differentially affect targets' pro-relational behavior—specifically, their responsiveness toward their partners—and to assess how targets' trait level of self-esteem might modulate such responses. Unfortunately, the results of this study do not permit firm conclusions about the effect of rival threat on LSEs' and HSEs' responsiveness because the rival threat manipulation was not as potent as I had anticipated. Consequently, I was not able to fairly assess Buss's (1988) proposition that people frequently respond to rival threat by emphasizing their love and care for their partner or my prediction that expressing a type of love and care in a support situation (i.e., by demonstrating responsiveness) would likely be challenging for at least some individuals (i.e., LSEs). Yet, findings from this study do suggest one interesting possibility: Expressing positivity in negative disclosure situations might behoove disclosers interested in eliciting responsiveness, at least under some conditions. Although causal evidence is needed, further investigation of this effect could provide valuable insights into how disclosers might elicit responsiveness when seeking support from their partners following negative events.

## Appendix A Tables

**Table 1**  
**Correlation Matrix of Manipulation Checks and Items from the Desirability Composite**

	1.	2.	3.	4.	5.	6.	7.	8.	9.
Manipulation check 1	1								
Manipulation check 2	.55**	1							
Manipulation check 3	.15	.26**	1						
Smart	.10	.15	.58**	1					
Funny	.13	.12	.63**	.21*	1				
Attractive	.23**	.24**	.69**	.28**	.34**	1			
Interesting	.06	.18	.81	.40**	.46**	.45**	1		
Likeable	.01	.19	.72	.35**	.32**	.30**	.58**	1	
Extroverted	.02	.16	.47	.14	.09	.13	.22*	.39**	1

*Note.* Manipulation check 1 = time partner wrote during writing task; Manipulation check 2 = target's estimated number of qualities that partner listed about rival; Manipulation check 3 = desirability composite.

\*\* $p < .01$ . \* $p < .05$ .

## Appendix B Figures

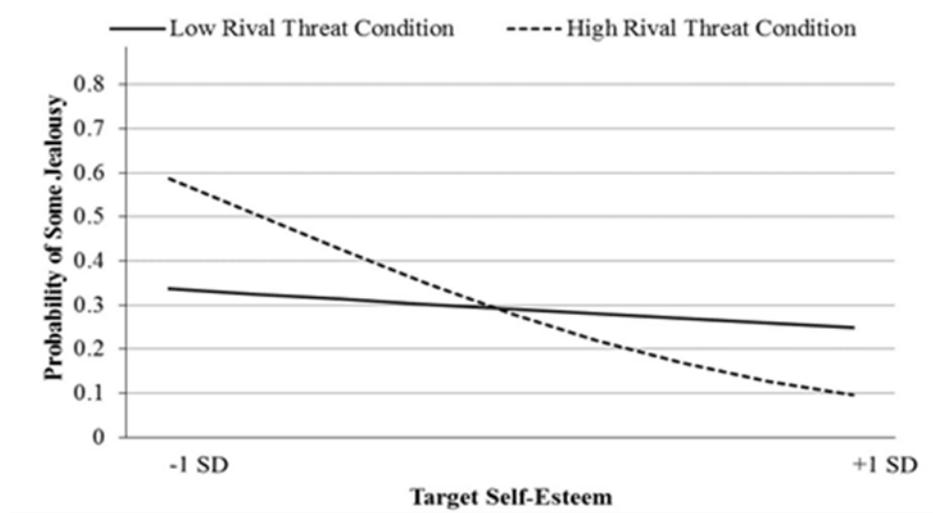


Figure 1

Probability of targets reporting some jealousy (versus no jealousy) as a function of target self-esteem and rival threat condition.

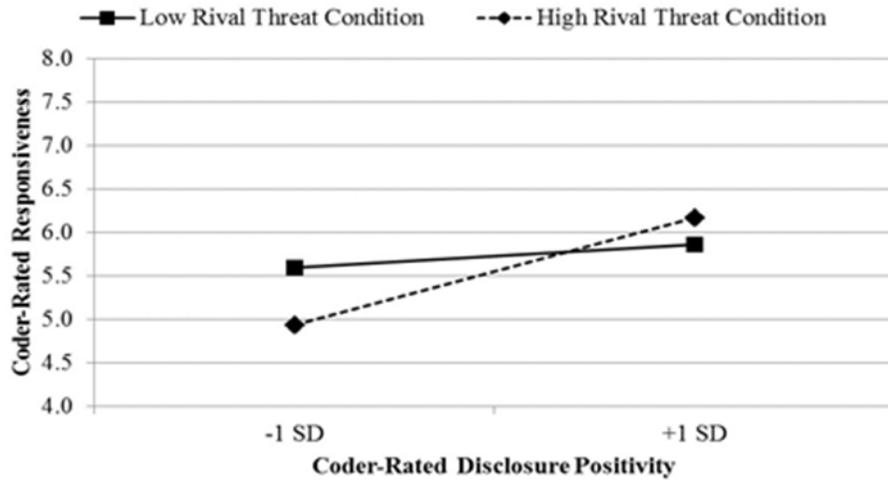


Figure 2

Coder-rated responsiveness (1 = *not at all*; 9 = *extremely*) as a function of rival threat condition and coder-rated disclosure positivity, adjusting for coder-rated negativity, expressivity, duration, target self-esteem, and a condition by self-esteem interaction.

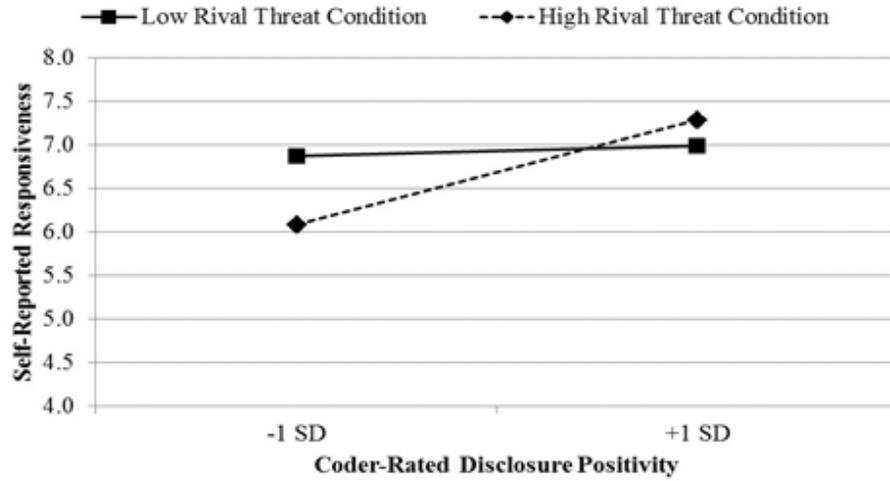
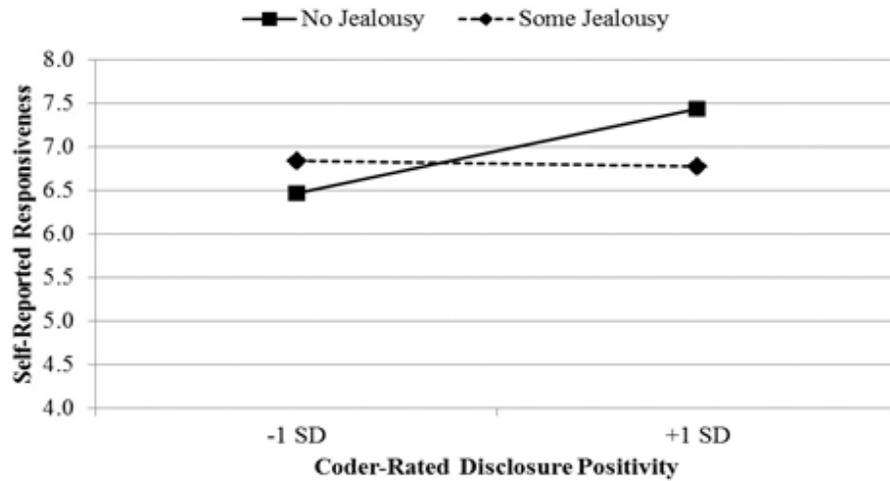


Figure 3

Targets' self-reported responsiveness (1 = *not at all*; 9 = *extremely*) as a function of rival threat condition and coder-rated disclosure positivity, adjusting for coder-rated negativity, expressivity, duration, target self-esteem, and a condition by self-esteem interaction.



**Figure 4**

**Targets' self-reported responsiveness (1 = *not at all*; 9 = *extremely*) as a function of jealousy (binary score) and coder-rated disclosure positivity, adjusting for coder-rated negativity, expressivity, duration, target self-esteem, condition, and jealousy by self-esteem and self-esteem by positivity interactions.**

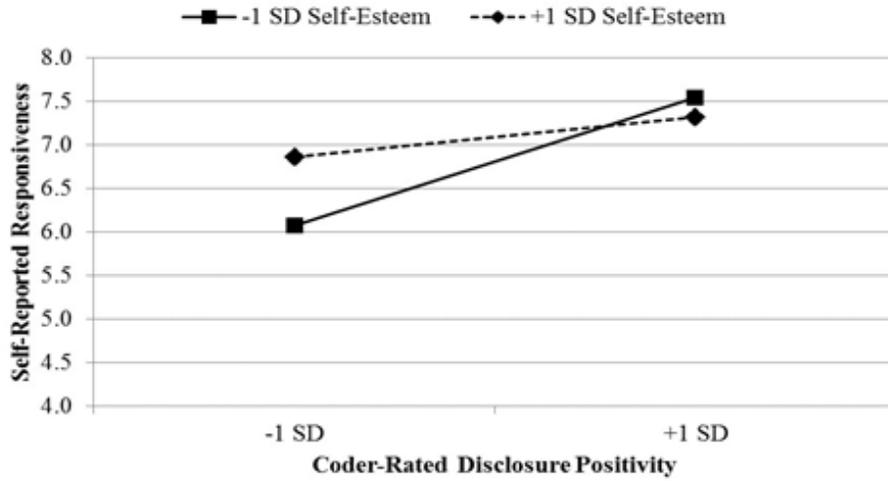


Figure 5

Targets' self-reported responsiveness (1 = *not at all*; 9 = *extremely*) as a function of self-esteem and coder-rated disclosure positivity, adjusting for coder-rated negativity, expressivity, and duration, target self-esteem, jealousy, condition, and jealousy by self-esteem and jealousy by positivity interactions.

## Appendix C Rival Profile

<i>Name: Alex</i>	
<i>Age: 20</i>	<i>Sex: Male/Female</i>
<i>Relationship status: Single</i>	<i>Major &amp; Year: Junior in Accounting</i>

### **What do you like to do for fun?**

To unwind on weeknights I like to watch some Netflix, and I'm a diehard Panther fan (H2P!!), so I go to most home basketball games. I also really love soccer. I've been playing since I was a kid, and it's something I've really grown to appreciate as a way to stay in shape while having an awesome time. My friends at Pitt and I play pick-up soccer up at the Cost Sports Center, so that's something I look forward to each week. I also try to go shows at Stage AE whenever I get the chance...there's nothing better than live music!

### **What do you consider your strengths?**

Math is something I've always been good at and I really enjoy it. I like the challenge of solving problems that initially look impossible, while knowing that there's a definite answer that I'll eventually be able to find. To study for our exams, I've created this Facebook page ("Crunching Numbers in the Cathedral") to organize group study sessions. I also make a pretty awesome cheesecake (family recipe).

### **How would your friends describe you?**

My two closest friends would probably say that I'm outgoing and am always down for trying new things. They'd probably also say that I'm easily excited by the good news they tell me. I love things to celebrate, so my friends' good news is always welcome in my book! I'd like to think they'd describe me as balanced. I work part time as a swim instructor for kids at the Y, but I also make it a priority to make time for the people I love.

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