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## Report

# Fostering relationship resilience: An intervention for low self-esteem individuals

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#### ABSTRACT

Low self-esteem individuals (LSEs) tend to react to relationship threats with self-protective and relationship-destructive behaviors that decrease their partners' satisfaction with the relationship over time (Murray, Bellavia, Rose, & Griffin, 2003). In the current studies, we examined the effects of a theoretically driven intervention on LSEs' relationship-destructive responses to threats. Participants were induced to reframe their partners' compliments in a more abstract, meaningful way (the "abstract reframing intervention" or ARI), an intervention that has been shown to increase LSEs' security in their relationships (Marigold, Holmes, & Ross, 2007). In Study 1, the ARI prevented LSEs from exaggerating the significance of relationship threats and self-protectively derogating their relationship (reported by LSEs in a one-time experimental situation). In Study 2, the ARI reduced LSEs negative, critical behaviors towards their partners (reported by LSEs' partners for a 2–3 week period). The findings have important implications for breaking the self-fulfilling cycle of insecurity.

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# Introduction

Even in the most satisfying relationships, partners will inevitably irritate, upset, or disappoint each other on occasion. One of the major challenges of relationship life is to be able to absorb the impact of relatively minor slights and prevent them from shaking one's core sense of relationship security. Some people have more trouble rising to this challenge than others.

Individuals with low self-esteem (LSEs) are particularly attentive to rejection cues (Dandeneau, Baldwin, Baccus, Sakellaropoulo, & Pruessner, 2007) and may perceive rejection even where none exists (Murray, Bellavia et al., 2003). LSEs are very quick to suppose that negative events in their relationships (e.g., transgressions or conflicts) will lead their partners to see critical faults in them (Murray, Rose, Bellavia, Holmes, & Kusche, 2002). Moreover, LSEs react to various real or imagined relationship threats by questioning their partners' acceptance (e.g., Cavallo, Fitzsimons, & Holmes, 2009; Murray, Holmes, MacDonald, & Ellsworth, 1998; Murray et al., 2002; Simpson, Rholes, & Phillips, 1996).

The consequences of taking an isolated negative relationship event so seriously can be far-reaching. When feeling acutely insecure, LSEs become cold and critical towards their partners. According to risk-regulation theory, LSEs protect themselves from further psychological hurt by distancing themselves from their partner and

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devaluing the relationship – a less valuable relationship is less painful to lose (Murray, Holmes, & Collins, 2006). The sad irony is that LSEs' oversensitivity to potential rejection manifests in the kinds of defensive behaviors that over time, tarnish their partners' rosy views and ultimately, undermine the well-being of the relationship (Downey, Freitas, Michaelis, & Khouri, 1998; Murray, Bellavia et al., 2003; Murray, Griffin, Rose, & Bellavia, 2003). People with high selfesteem (HSEs), on the other hand, tend to respond to threats by embellishing their partners' acceptance and drawing closer to the relationship (e.g., Murray, Bellavia et al., 2003; Murray et al., 1998).

What has not yet been demonstrated, to our knowledge, is that LSEs' relationship-damaging reactions to threats can be reduced by bolstering their felt security. This demonstration would provide a critical test of risk-regulation theory. Increasing LSEs' confidence in their partner's positive regard should encourage LSEs to risk maintaining closeness with their partners even when the potential for rejection looms (Murray et al., 2006). The goal of the current two studies was to determine whether an intervention we previously developed to increase LSEs' felt security in their romantic relationships (Marigold et al., 2007) would prevent them from exaggerating the significance of relationship threats and self-protectively derogating their relationship (as reported by LSEs; Study 1), as well as reduce their negative, critical behaviors towards their partners (as reported by LSEs' partners; Study 2).

The abstract reframing intervention

Although LSEs tend to attribute meaning and significance to their partners' negative behaviors, they are less likely to do the

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same with their partners' positive behaviors. LSEs often discount their partners' expressions of acceptance (Cameron, Stinson, Gaetz, & Balchen, in press; Gagne, Khan, Lydon, & To, 2008) and doubt the sincerity of their kind words (Lemay & Clark, 2008a, 2008b; Marigold et al., 2007). Compared to HSEs, LSEs naturally use more past tense when asked to describe a partner's compliment, implying that they limit the feedback to something their partner once said as opposed to taking it as an indication of their partner's current feelings about them (e.g. "He said I was thoughtful" vs. "He appreciates that I am thoughtful") (Marigold et al., 2007).

In accordance with risk-regulation theory, we propose that LSEs dismiss positive feedback from their partner to protect themselves from future hurt. LSEs become anxious that they cannot live up to such positive expectations and imagine being rejected by close others who eventually confirm their inadequacies (Logel et al., 2008; Murray et al., 1998; Wood, Heimpel, Newby-Clark, & Ross, 2005). Allowing oneself to bask in the warmth of their partner's affection would make this future rejection all the more painful and humiliating (see also Murray et al., 2006).

In a previous paper, we described a short writing exercise that made it "safe" for LSEs to take their partners' compliments to heart, and showed that it had lasting effects. In Marigold et al. (2007), all participants recalled a compliment from their romantic partner. Participants in the "Abstract Reframing Intervention" (ARI) condition were then asked to "Explain why your partner admired you. Describe what it meant to you and its significance for your relationship." In control conditions participants were asked either to describe the concrete details about the time their partner paid this compliment (where they were, what they were doing, etc.), or were provided with no further instructions regarding how to report the compliment. In the control conditions, LSEs evaluated the compliments less positively than did HSEs, although objective coders rated the compliments generated by LSEs and HSEs as equally positive. LSEs also reported lower state self-esteem, felt security, and relationship valuing than did HSEs in the control conditions. The ARI boosted all of these measures for LSEs; they were as positive as HSEs about their partners' compliments, and most crucially, about their relationships more generally. Moreover, when surveyed about their relationship again two or more weeks later (with no reminder of the earlier writing exercise), LSEs who had received the ARI still felt more secure and viewed their relationship more favorably than did LSEs in the control conditions.

From these previously published studies, we conclude that simply reminding participants of their partners' positive behavior is not sufficient to increase LSEs' perceptions of their relationship quality. Although we have not yet fully clarified the "magic ingredient" in the ARI, we suggest that the wording of the ARI instructions is important. In contrast to an action verb like "said" (used in the control conditions), a state verb like "admired," implies more about the subject of the verb than the context of the action (Semin & Fiedler, 1988), and fosters the perception that an event has lasted longer and is more likely to recur (Semin & De Poot, 1997). Thus, being admired (vs. having something nice said to them) could persuade LSEs to perceive their partner's positive evaluation as more enduring. Consistent with this reasoning, participants used more present tense and fewer past tense verbs to describe compliments in the ARI conditions than in the control conditions (Marigold et al., 2007). If they perceive themselves as receiving ongoing admiration from their partner instead of a one-time compliment, LSEs' concerns about being unable to live up to their partners' lofty expectations should be alleviated. Describing the meaning and significance of the compliment should undermine LSEs' concern that their partner simply felt obligated to say something nice to them (Lemay & Clark, 2008b).

The studies in Marigold et al. (2007) focused on the whether the ARI would *promote positive outcomes* for participants, namely, increase the positivity of their perceptions of their relationships. The current paper extends this line of research in a novel direction by investigating whether the ARI will also *prevent negative outcomes* for participants (and their partners), namely, decrease the negativity of their perceptions of, and behavior towards their partners in threatening situations. In both studies we included HSEs for comparison purposes. In line with our previous studies (Marigold et al., 2007), we did not expect HSEs to be affected by the ARI because, in the absence of any intervention, they are already very positive about their partners' compliments and about their relationships more generally.

## Study 1: The ARI as a buffer against relationship threats

LSEs respond to even minor relationship threats by withdrawing from and derogating their partners, a strategy that is intended to soften the sting of impending rejection but ends up making rejection more likely to occur (Murray et al., 1998, 2002). HSEs are sufficiently confident in their partners' enduring positive regard that they are able to avoid taking threats to heart. In Study 1 we tested whether assuring LSEs of their value to their partners via the ARI would similarly buffer LSEs from the deleterious effects of a minor relationship threat, which has not been tested previously. This study provides a critical test of risk-regulation theory: If LSEs' self-protection concerns are alleviated, LSEs should be less likely to behave in relationship-destructive ways (Murray et al., 2006).

## Method

Participants and procedure

Seventy-six undergraduate students (21 men and 55 women) in dating relationships participated in a study of "Relationship Perceptions" in exchange for course credit. Mean age was 20 years and mean relationship length was 21 months.

The study was completed online. Participants completed a measure of trait self-esteem first and demographic questions last. The order of the rest of the questionnaires varied by condition. In the threat condition (N = 28) the order was: threat manipulation, state self-esteem, relationship quality, ARI. In the buffered-threat condition (N = 24), the order was: ARI, threat manipulation, state self-esteem, relationship quality. In the control condition (N = 24), the order was: state self-esteem, relationship quality, threat manipulation, ARI. Thus, the main dependent variables (state self-esteem and relationship quality) were completed first in the control condition (to establish baseline ratings), immediately following a threat in the threat condition, and following a threat that was preceded by the ARI in the buffered-threat condition.

#### Materials

*Trait self-esteem.* Participants responded to the 10 Rosenberg (1965) self-esteem items on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) ( $\alpha$  = .93).

Threat manipulation. Participants were given a "secret selves questionnaire" adapted from Murray et al. (2002). The instructions noted that "Most individuals have some more negative sides to their personal habits, preferences, or personality traits that they rather their partners not fully see... Researchers are interested in these 'secret selves' because partners eventually discover one another's more negative sides and conflicts could develop as a result." They were provided with five categories of potentially negative

<sup>&</sup>lt;sup>1</sup> See Collins, Ford, Guichard, and Allard (2006) for a similar conclusion regarding anxiously attached individuals, who tend to have lower self-esteem (Brennan & Morris, 1997; Collins & Read, 1990).

things people might want to keep from their partners (habits or behaviors, personal preferences or opinions, personality characteristics, private thoughts, and personal history) and asked to provide examples of the three that were most relevant for them. They were also asked to describe how their partners might react to these aspects of themselves being revealed.

ARI. As in Marigold et al. (2007), participants were asked to "Think of a time when your partner told you how much he/she liked something about you. For example, a personal quality or ability you have that he/she thinks very highly of, or something you did that really impressed him/her." They noted how long ago this event occurred, and were then asked to "Explain why your partner admired you. Describe what it meant to you and its significance for your relationship."

State self-esteem. Participants indicated how they felt about themselves "right now, at this moment" on 10 7-point, bipolar adjective scales (e.g., "accepted–rejected," "unimportant–important") (adapted from McFarland & Ross, 1982). Items were reverse-scored where appropriate and averaged to created a measure of state self-esteem ( $\alpha$  = .87, M = 5.54, SD = .82).

Relationship quality. Participants were instructed to consider "how you feel about your relationship right now." They responded to 18 statements on a scale of 1 (not at all true) to 7 (completely true) (Marigold et al., 2007), reflecting aspects of felt security, (e.g., "I am confident that my partner will always want to look beyond my faults and see the best in me,") commitment (e.g., "I am very committed to my relationship"), and satisfaction (e.g., "I am extremely happy with my current romantic relationship"). These 18 items were averaged to create a measure of relationship quality ( $\alpha$  = .95, M = 5.69, SD = 1.08).

Trait self-esteem was correlated significantly with state self-esteem (r(76) = .56, p < .01), and marginally with relationship quality (r(76) = .21, p = .07). State self-esteem and relationship quality were also significantly correlated (r(76) = .46, p < .01).

#### Results

All dependent variables were regressed on condition (threat vs. buffered-threat vs. control; effect-coded with two vectors), SE (centered), and the condition  $\times$  SE interaction (according to West, Aiken, & Krull, 1996). Simple effects test were conducted comparing differences among conditions at LSE, differences among conditions at HSE, and LSEs to HSEs within each condition. Low and high SE were calculated at -1 or +1 SD, respectively. There were no differences among conditions for HSEs on any of the dependent variables.

State self-esteem. Main effects of condition ( $\beta$  = -.21, t(70) = -2.01, p < .05) and SE ( $\beta$  = .59, t(70) = 6.16, p < .01) were qualified by a condition x SE interaction ( $\beta$  = .30, t(70) = 2.79, p < .01,  $R^2$  = .065) (see Fig. 1a). LSEs in the threat condition and the buffered-threat condition reported lower state self-esteem than did LSEs in the control condition ( $\beta$  = -.66, t(70) = -3.82, p < .01 for threat to control comparison;  $\beta$  = -.35, t(70) = -2.43, p < .05 for buffered-threat to control comparison), but the decrease was larger for LSEs in the threat condition. LSEs in the threat condition reported marginally lower state self-esteem than did LSEs in the buffered-threat condition ( $\beta$  = -.29, t(70) = -1.95, p < .06). As would be expected, trait self-esteem was positively related to state self-esteem in all conditions (control condition:  $\beta$  = .29, t(70) = 1.82, p < .08; threat condition:  $\beta$  = .99 t(70) = 5.16, p < .01; buffered-threat condition:  $\beta$  = .47, t(70) = 3.48, p < .01).

*Relationship quality.* Main effects of condition ( $\beta = -.27$  t(70) = -2.14, p < .05) and SE ( $\beta = .28$ , t(70) = 2.37, p < .05) were

qualified by a condition  $\times$  SE interaction ( $\beta$  = .28 t(70) = 2.09, p < .05,  $R^2$  = .056) (see Fig. 1b). LSEs in the threat condition reported lower relationship quality than did LSEs in the control condition ( $\beta$  = -.56, t(70) = -2.61, p = .01) or the buffered-threat condition ( $\beta$  = -.45, t(70) = -2.51, p < .05). Importantly, among LSEs, the buffered-threat condition did not differ significantly from the control condition ( $\beta$  = .07, ns). The simple effect of SE on relationship quality was significant only in the threat condition ( $\beta$  = .66, t(70) = 2.76, p < .01).

*Mediation*. Mediation analyses were conducted to determine whether decreased feelings of personal worth led threatened LSEs (who were not buffered by the ARI) to report lower levels of relationship quality. Sobel's test of mediation (Sobel, 1982) revealed that the interaction effect on state self-esteem mediated the effect on relationship quality (z = 2.13, p < .05).<sup>2</sup>

#### Discussion

Study 1 demonstrated that using the ARI to assure LSEs of their personal value prevented them from devaluing their relationships in the face of a relationship threat. These findings are important in demonstrating that LSEs' tendency towards defensive, negative behavior is not a fixed aspect of their personalities. Rather, devaluing the source of potential rejection is a way for LSEs to protect themselves from the pain of rejection. When their self-protective motivation was undermined by the ARI, LSEs responded to threats just as positively as HSEs did.

The reader may wonder whether the abstract reframing of the compliment was necessary to produce this threat-buffering effect, or whether simply reminding participants of a partner's positive behavior would have been sufficient. We suspect not, based on the findings in Marigold et al. (2007). The studies in that paper showed that asking LSEs to describe the concrete details of their partners' compliment, or to question whether their partners' compliment might have had greater meaning or significance, did not increase LSEs' ratings of relationship quality from baseline as the abstract reframing instructions did. This issue is also addressed in Study 2 by means of a control condition in which participants were asked to write freely about a partner's compliment.

## Study 2: Effects of the ARI on participants' partners

Study 1 measured the negativity of LSEs' *feelings* about their relationship partners after an experimentally-created threat. The purpose of Study 2 was to determine whether the ARI would reduce the negativity of LSEs' *behavior* towards their partners. The more LSEs are concerned that their partner is displeased with them, the more they self-protectively derogate their partner and behave in a more cold, critical, and hostile manner (Murray, Bellavia et al., 2003). If the ARI assures LSEs that they are valued by their partner, then they should behave less negatively towards their partner.

In Study 2, participants completed either the ARI or control materials. Two weeks later, we solicited reports from participants' partners to examine whether LSEs who completed the ARI behaved better towards their partners. LSEs are likely to find various partner behaviors somewhat threatening over a two-week period, as even a partners' bad mood can activate LSEs' concerns that they have

<sup>&</sup>lt;sup>2</sup> Baron and Kenny's (1986) four requirements for mediation were also met for this analysis: There was a significant relationship between the independent variable (the condition x SE interaction term) and the dependent variable, between the interaction term and the mediator, and between the mediator and the dependent variable (controlling for the interaction term). The effect of the interaction term on the dependent variable dropped to nonsignificance when the mediator was included in the model.

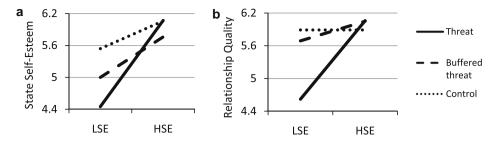
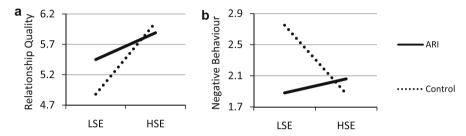


Fig. 1. (a) State self-esteem as a function of condition and trait SE: Study 1. (b) Relationship quality as a function of condition and trait SE: Study 1. Note: Low and high SE were calculated at -1 or +1 SD, respectively.



**Fig. 2.** (a) Relationship quality as a function of condition and trait SE: Study 2. (b) Partner's report of participant's negative behavior as a function of participant's condition and trait SE: Study 2. *Note*: Low and high SE were calculated at -1 or +1 SD, respectively.

done something to upset their partners. LSEs' typical response to even ambiguous threats of rejection in everyday life is to become upset, reactive, and hostile (Murray, Griffin et al., 2003).Our hypothesis was that the partners of LSEs who received the ARI would report fewer of these LSEs' negative behaviors over the two weeks. A demonstration that the effects of the ARI are not simply "in the heads" of LSEs would be an important step in affirming the usefulness of this reframing technique as a method for relationship improvement.

## Method

## Participants and procedure

Eighty-seven undergraduate students (20 men and 67 women) who were currently in romantic relationships participated in a two-part online study of "Relationship Perceptions" in exchange for course credit. The majority of participants identified themselves as "dating" (70). Additionally, 10 participants were "living together," 1 was "engaged," and 6 were "married." The mean age of participants was 21 years and their mean relationship length was 29 months.

At the end of the study, participants were invited to provide the first name and email address of their romantic partner so that the researcher could invite their partner to complete a short question-naire in two weeks. Sixty (69%) participants provided their partner's information, and 39 partners participated (33 men and 6 women) (45% of the Part 1 sample). Of the participants' whose partners completed the questionnaire, 21 were in the ARI condition and 18 were in the control condition. They initially reported higher relationship quality (t(85) = -2.03, p < .05), but similar levels of self-esteem (t(85) = .02, ns), relative to participants' whose partners did not participate.

## Participants' materials

*Trait self-esteem.* Same as Study 1,  $\alpha$  = .90.

Compliment manipulation. Participants in the ARI condition (N = 44) received the same instructions as in Study 1. Participants

in the control condition (N = 43) were also asked to "Think of a time when your partner told you how much he/she liked something about you. For example, a personal quality or ability you have that he/she thinks very highly of, or something you did that really impressed him/her." They were then simply asked to "Describe the event in the space below."

*Relationship quality.* The same measure of relationship quality ( $\alpha$  = .94, M = 5.57, SD = .88) was used as in Study 1.<sup>3</sup>

# Partner materials

*Trait self-esteem.* Partners completed the Rosenberg Self-Esteem scale ( $\alpha = .84$ ).

Frequency of positive and negative behavior. Partners were instructed to "think about what has happened in your relationship in the last 2 weeks." Using a five-point scale ( $1 = not \ at \ all$  to  $5 = many \ times$ ), they rated the frequency of four positive participant behaviors (e.g., "told you how much he/she cares about you," "supported or encouraged you;"  $\alpha = .74$ ) and four negative participant behaviors (e.g., "criticized you," "acted inconsiderately towards you;"  $\alpha = .81$ , M = 2.15, SD = .86)

Trait self-esteem was correlated significantly with relationship quality (r(87) = .48, p < .01), and marginally with negative behavior (r(39) = -.30, p = .06). Relationship quality and negative behavior were also significantly correlated (r(39) = -.39, p < .05).

#### Results

All dependent variables were regressed on condition (ARI vs. control), SE, and the condition x SE interaction. Simple effects test were conducted as in Study 1. We report the results first for the participants and then for their partners.

<sup>&</sup>lt;sup>3</sup> Several measures assessing participants' perceptions of the compliment were included, but because they are not of central relevance to this paper they are not discussed here. Further information may be requested from the first author.

#### **Participants**

*Relationship quality.* The analyses revealed a main effect of SE  $(\beta = .45, t(83) = 4.86, p < .01)$  that was qualified by a condition x SE interaction  $(\beta = -.21, t(83) = -2.21, p < .05, R^2 = .042)$  (see Fig. 2a). As expected, LSEs in the ARI condition reported higher relationship quality than did LSEs in the control condition  $(\beta = .32, t(83) = 2.40, p < .05)$ . LSEs reported significantly lower relationship quality than did HSEs in the control condition  $(\beta = .66, t(83) = 5.32, p < .01)$  but only marginally lower relationship quality than LSEs in the ARI condition  $(\beta = .25, t(83) = 1.77, p < .09)$ . There was no effect of condition for HSEs,  $\beta = .10, ns$ .

## Partners

Frequency of negative and positive participant behavior. In these analyses we controlled for the time between participants' completion of Part 1 and partner's completion of their survey (M = 16.3 days), and for partner's level of self-esteem (which has been previously shown to be related to perceptions of positive and negative behavior; Marigold et al., 2007). For perceptions of participants' negative behaviors there was a marginal condition × SE interaction ( $\beta$  = .31, t(33) = 1.88, p < .07,  $R^2$  = .083) (see Fig. 2b). Simple effects revealed that, as predicted, the partners of LSEs who had been in the ARI condition reported fewer negative behaviors from those LSEs compared to the partners of LSEs who had been in the control condition ( $\beta$  = .48, t(33) = 2.25, p < .05). As well, the effect of SE was significant in the control condition  $(\beta = -.51, t(33) = -2.45, p < .05)$ , showing that LSEs typically behaved more negatively towards their partners than did HSEs. The effect of SE was not significant in the ARI condition, however,  $\beta$  = .11. Also, the effect of condition was non-significant for HSEs,  $\beta = -.09$ , ns.

Finally, we tested whether the condition  $\times$  self-esteem interaction on partners' reports of participants' negative behavior was mediated by participants' ratings of relationship quality two weeks earlier. It was not.

Although the ARI decreased partners' ratings of the frequency of LSEs' negative behaviors, it did not increase partners' ratings of the frequency of positive behaviors (interaction  $\beta = -.11$ , ns). Internal analyses showed that SE was not significantly associated with ratings of positive behavior in the control condition r(18) = .16, ns, whereas SE was associated with ratings of negative behavior in the control condition, r(21) = -.47, p < .05. This suggests that LSEs do not typically exhibit fewer positive behaviors than HSEs do, but that they do exhibit more negative behaviors.

## Discussion

Reframing a compliment from their romantic partner in a more abstract, meaningful way led LSEs to report higher relationship quality in general, replicating the findings from studies reported in Marigold et al. (2007). The novel aspect of the current study was that compared to LSEs who had been in the control condition, LSEs who had been in the ARI condition actually *behaved* less negatively towards their partners following the intervention, as reported by their partners.<sup>4</sup> Given the results of Study 1, that the ARI effectively buffers LSEs against the negative effects of a relationship threat, we suggest that the change in LSEs' behavior in Study 2 was largely in LSEs' reactions to perceived threats – mundane slights, hurt feelings, and disappointments that are likely to have occurred at least a few times over the course of the intervening two or three weeks. Future research using daily diary methodology is needed to confirm this hypothesis.

The partner reports appear to have come from a biased sample. Participants whose partners participated in the study reported higher relationship quality than did participants whose partners did not participate. Perhaps the ARI would not have decreased the negative behavior of LSEs who were less satisfied with their relationships. Whether the effects on LSEs' negative behaviors would replicate with a more distressed sample remains a question for future investigation. We do not suppose, however, that a simple cognitive reframing technique could save a truly "bad" relationship. Research indicates that LSEs who are in "good" relationships frequently feel insecure, and their insecurity can ultimately threaten the relationship. We suggest that it is this group that can potentially benefit most from the ARI intervention by fostering relationship resilience.

#### **General discussion**

Maintaining a secure and satisfying romantic relationship is particularly challenging for LSEs. When feeling acutely insecure, LSEs engage in defensive, critical behaviors that over time decrease their partner's satisfaction with the relationship and make the feared rejection all the more likely to occur (Downey et al., 1998; Murray, Bellavia et al., 2003; Murray, Griffin et al., 2003).

The ARI has been shown to affect numerous outcomes reported by the participant in a positive manner, including relationship quality (Marigold et al., 2007). This effect was replicated in Study 2. The novel contribution of the current paper is in showing that the ARI prevented LSEs from engaging in self-protective, relationship-destructive reactions when feeling threatened (Study 1). Study 2 provided longitudinal evidence for this conclusion from the partners' perspective. The findings from these studies affirm the usefulness of the ARI for improving the relationships of LSEs.

In these studies, HSEs were unaffected by the manipulations, presumably because their confidence in their partners' love allows them to make the most of positive feedback spontaneously. These studies demonstrated that LSEs can be encouraged to believe that they are loved and accepted as much as HSEs perceive themselves to be. This is, in fact, the truth: LSEs are regarded just as positively by their partners as are HSEs (Murray, Holmes, & Griffin, 2000), at least until their unwarranted insecurities become problematic for their partners.

## Possible mechanisms of the effect

Why does the ARI have both immediate and lasting effects on participants' feelings and behaviors? There are at least two plausible and complementary explanations.

## "Safe" enhancement opportunity

The ARI may be effective because it provides a "safe" enhancement opportunity for LSEs (Rudich & Vallacher, 1999; Wood, Giordano-Beech, Taylor, Michela, & Gaus, 1994). The suggestion that participants' partners highly valued something specific about them, rather than that they highly valued the participant overall, should be a safer and more acceptable conclusion for LSEs (cf. Wood, Perunovic, & Lee, 2009). This conclusion may be achieved in part by the use of a state verb like "admired," which induces the perception that the compliment represents the partner's enduring view, rather than being tied to the particular context in which it was given (Semin & De Poot, 1997; Semin & Fiedler, 1988). Also, viewing one compliment in a broader way may have increased LSEs' confidence that they possess other admirable qualities.

It is important to note that the mere suggestion that the compliment might have been meaningful and significant is not sufficient

<sup>&</sup>lt;sup>4</sup> We note that although the simple effects were significant, the overall interaction was marginal and needs replication.

to produce these effects. In Marigold et al. (2007), Study 3, when participants were asked to "Consider whether [the compliment] was meaningful to you and significant for your relationship" rather than more directly "Describe what [the compliment] meant to you and its significance for your relationship" (the ARI instructions), the positive effects of writing about the compliment were eliminated. The explicit direction of the ARI, which discourages LSEs from questioning the importance of the compliment (thereby activating their doubts), is a critical aspect of the manipulation.

#### *Self-perpetuating cycle of security*

The ARI may teach LSEs a new way of thinking about other instances of positive feedback from their partners. Upon completing the study materials, LSEs may view subsequent positive behaviors from their partners in a more abstract way, which nourishes their sense of relationship quality and buffers them from everyday slights and disappointment in their relationships. In this manner the ARI might be said to have a "snowball" effect. Further research is underway to test this hypothesis.

## Theoretical implications

The present research supports and extends the risk regulation model proposed by Murray et al. (2006). The central tenet of this model is that confidence in a partner's positive regard allows people to put self-protection motives aside. The current studies are the first to show that experimentally assuring LSEs of their value to their partners (through abstract compliment reframing) prevents LSEs from derogating their relationships when feeling threatened. These findings are important in demonstrating that LSEs' tendency towards defensive, critical behavior is not a fixed aspect of their personalities (cf. Ayduk, Downey, Testa, Yen, & Shoda, 1999; Downey et al., 1998; Leary, 2005). Rather, devaluing their partner is a way to protect themselves from the pain of rejection. When induced to feel more secure, LSEs respond to relationship threats just as positively as HSEs do.

## **Practical implications**

In closing, we suggest that improving LSEs' romantic relationships is likely to have larger implications for other aspects of well-being. When their partners devalue them, vulnerable LSEs are more likely to experience emotional distress and depressive symptoms (Katz, Beach, & Joiner, 1998; Maestas et al., 2008). LSEs' poor quality social bonds (with friends and family members as well as romantic partners) also contribute to symptoms of physical illness (Stinson et al., 2008; see also Uchino, Cacioppo, & Kiecolt-Glaser, 1996). If the ARI increases LSEs' sense of relationship quality and decreases their defensive behaviors with various significant others, it may also render LSEs less vulnerable to mental and physical health problems.

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