

More Than Words: Reframing Compliments From Romantic Partners Fosters Security in Low Self-Esteem Individuals

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Although people with low self-esteem (LSEs) doubt their value to their romantic partners, they tend to resist positive feedback from their partners. This resistance undermines their relationships and has been difficult to overcome in past research. The authors investigated whether LSEs could be induced to take their partners' kind words to heart by manipulating how abstractly they described a recent compliment. In 3 studies, LSEs felt more positively about the compliments, about themselves, and about their relationships—as positively as people with high self-esteem (HSEs) felt—when they were encouraged to describe the meaning and significance of the compliments. The effects of this abstract meaning manipulation were still evident 2 weeks later. Thus, when prompted, LSEs can reframe affirmations from their partners to be as meaningful as HSEs generally believe them to be and, consequently, can feel just as secure and satisfied with their romantic relationships.

Keywords: romantic relationships, relationship security, self-esteem, positive feedback, memory

“Does he love me? I want to know
How can I tell, if he loves me so?”

—Betty Everett, *The Shoop Shoop Song*, 1964

Romantic relationships have enormous potential to be self-affirming. Whether relationships fulfill this potential, however, depends in part on people's confidence that their partners truly love and value them. One might intuit that people who are relatively uncertain that they are loved would be particularly eager to embrace positive feedback from their partners. Considerable research suggests the opposite: Although people with low self-esteem (LSEs) have more doubts about their partners' love than do people with high self-esteem (HSEs), they are less likely to benefit from their partners' praise. In this article, we review previous research demonstrating and explaining this paradox and then present three experiments showing how LSEs can be persuaded to take their partners' kind words to heart.

Self-Esteem (SE), Unwarranted Insecurities, and Dependence Regulation

LSEs tend to report less satisfaction than do HSEs in both marital and dating relationships (Fincham & Bradbury, 1993;

Murray, Holmes, & Griffin, 1996). There is no evidence, however, to suggest that they attract less desirable partners (Murray et al., 1996; Murray, Holmes, & Griffin, 2000). Instead, LSEs' relatively negative evaluations of their partners seem to be self-protective responses to their beliefs that their partners think relatively negatively of them (Murray et al., 2000; Murray, Holmes, Griffin, Bellavia, & Rose, 2001). However, LSEs underestimate how much they are actually loved by their partners, and, in reality, they are loved just as much as are HSEs (Murray et al., 2000, 2001).

The consequences of these unwarranted insecurities for relationship well-being are well documented. Doubtful LSEs search for information about their partners' caring in a biased manner, being too quick to perceive and generalize from signs of possible rejection (Murray, Rose, Bellavia, Holmes, & Kusche, 2002). LSEs react to various potential threats (e.g., guilt about a transgression, a conflict with their partner) with reduced security in their partners' acceptance. When feeling insecure, they regulate their dependence on the relationship by devaluing it and by distancing themselves from their partner. On the other hand, HSEs tend to respond to threats by embellishing their partners' acceptance and drawing closer to the relationship (Murray, Bellavia, Rose, & Griffin, 2003; Murray, Holmes, MacDonald, & Ellsworth, 1998; Murray et al., 2002). Ironically, LSEs are initially accepted and valued by their romantic partners as much as are HSEs, but their oversensitivity to rejection manifests in defensive behaviors that over time, tarnish their partners' rosy views and, ultimately, undermine the well-being of the relationship (Murray, Bellavia, et al., 2003; Murray, Griffin, Rose, & Bellavia, 2003).

SE and Interpreting Positive Behaviors

LSEs report wanting their romantic partners to see them much more positively than they see themselves (Murray et al., 2000). Yet their consistent underestimation of how much their partners actually love and value them is hard to overcome because they fail to seize opportunities to enhance their feelings of acceptance. Just as

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LSEs overgeneralize the implications of failure, but not success, for their overall self-evaluation (Brown & Dutton, 1995; Kernis, Brockner, & Frankel, 1989), they readily make generalizations about the (in)security of their partners' love only after negative and not positive events. LSEs react to threats to SE by becoming less certain about their partners' acceptance, but they do not report feeling more accepted after boosts to SE (Murray, Griffin, et al., 2003).

Several researchers have reported findings that suggest that LSEs are too hesitant to read abstract, generalized meaning into their partners' positive behaviors. They have used moderating variables that have been shown to be reasonable proxies for LSE, such as attachment anxiety (Brennan & Morris, 1997; Collins & Read, 1990) and dissatisfaction (Fincham & Bradbury, 1993; Murray et al., 1996). In one study, anxiously attached individuals rated their partners' behavior as less supportive than did secure participants in a stressful situation, but observers rated the partners as equally supportive (Collins & Feeney, 2004). In another study, LSEs reported seeing significantly fewer acceptance cues than did HSEs when they believed that an interaction partner's behavior was directed at them. When they thought the same behavior was directed at someone else, however, LSEs saw as many acceptance cues as did HSEs (Cameron, Anthony, Gaetz, & Balchen, 2006).

When asked directly to make attributions for positive partner behaviors, dissatisfied individuals were less likely to report that such behaviors were global in their implications or likely to recur (Camper, Jacobson, Holtzworth-Munroe, & Schamling, 1988), even though they reported that these behaviors had a positive impact on them (Holtzworth-Munroe & Jacobson, 1985). Relative to securely attached individuals, anxiously attached individuals also have been shown to make more relationship-threatening attributions for their partners' positive behaviors, for example, that their partner was motivated by selfish concerns rather than genuine love and affection. However, anxious individuals were no less likely than secures to report being happy about these behaviors (Collins, Ford, Guichard, & Allard, 2006). People who are distressed about their romantic relationships do seem to appreciate positive feedback from their partners. However, their unwillingness to make meaningful generalizations from positive feedback interferes with their ability to fully benefit from it.

Why are the people most in need of acceptance, such as LSEs (Leary, Tambor, Terdal, & Downs, 1995; Rudich & Vallacher, 1999), the least likely to find it? Drawing from Murray, Holmes, and Collins's (2006) risk regulation model, we suggest that LSEs tend to minimize the meaning of positive events in their relationship to avoid being hurt if it turns out that they were not really loved after all. LSEs' uncertainty about their worth leads them to err on the side of caution, taking a risk-averse orientation to appraising the meaning of events in their relationships. That is, they are more ready to generalize from signs of rejection than to trust signs of acceptance (Murray et al., 2006; see also L. Campbell, Simpson, Boldry, & Kashy, 2005, for a similar conclusion regarding anxiously attached individuals). One problem with this self-protective orientation¹ is that the strongest, most satisfying relationships are those in which partners can set aside self-protection goals and risk behaving in relationship-promotive ways that increase closeness and dependence (Murray et al., 2006). The research of Murray and her colleagues has focused on LSEs' self-protective tendency to distance themselves from their partners

in response to perceived signs of rejection. In the present research, we examined LSEs' hesitancy to trust signs of acceptance, and how overcoming this hesitancy could facilitate relationship-promotive behaviors.

SE and Reactions to Positive Feedback

How might LSEs be helped to recognize that they are valued by their partners? The most direct approach would be simply to tell them that they possess desirable attributes. Having less positive and certain self-conceptions than HSEs (J. D. Campbell et al., 1996), LSEs might be expected to embrace such feedback. And there is no evidence to suggest that they are any less likely than HSEs to possess desirable attributes, as objective measures show they are equally well-liked and intelligent (Baumeister, Campbell, Krueger, & Vohs, 2003). But telling people how well-liked or intelligent they are evokes quite different reactions from LSEs and from HSEs.

For LSEs, positive feedback has no impact, or it backfires and activates relationship-damaging dependence regulation processes. After success on a bogus intelligence test, compared with neutral or no feedback, LSEs felt more anxious about being accepted by their family, friends, and romantic partners (Logel, Spencer, Wood, Holmes, & Zanna, 2006; Murray et al., 1998). Positive feedback on a relationship trait had similar effects: LSEs felt more insecure about their relationship and evaluated it more negatively after being told that they were high in "considerateness" (Murray et al., 1998). Similar results have been found with attachment anxiety as a moderating variable: Compared with a no feedback condition, anxious participants paradoxically viewed their relationships more pessimistically after having been told that their partners viewed them as exceptionally warm, attractive, and intelligent (Peach & MacDonald, 2004). In contrast, in all of these studies, positive feedback benefited secure, HSE participants.

Why do LSEs react unfavorably when they are directly told that they are worthy and desirable individuals? Consistent with other researchers' speculations (Wood, Anthony, & Foddis, 2006), we suggest that positive feedback highlights self-discrepant standards and activates self-evaluation concerns for LSEs. Because LSEs doubt their possession of positive attributes, they have difficulty believing that others see such positive attributes in them. They may worry that success will raise others' expectations of them, which they are not confident about meeting in the future (Logel et al., 2006; Murray et al., 1998). They may question what they must be lacking if, despite possessing such positive qualities, their partners still do not value them. Further, simply focusing on strengths may remind LSEs of their faults (Showers, 1992) and highlight that acceptance from their partners is conditional on their maintenance of virtues (Baldwin & Sinclair, 1996). Therefore, LSEs become anxious that they cannot live up to such a positive self-image and imagine disappointing and being rejected by close others when the truth is revealed. This interpretation is consistent with self-

¹ The tendency of LSEs to engage in self-protection has also been documented in a number of domains outside of romantic relationships. They would like to be recognized as having desirable traits in general, not just those desired by romantic partners, but they are cautious to claim them in order to minimize the chance of being humiliated when they fail to demonstrate them consistently (Baumeister, Tice, & Hutton, 1989).

verification theory's notion of pragmatic concerns, which suggests that people with negative self-views expect to have more difficult interactions with relationship partners who see them overly positively and hence fail to recognize their limitations (Swann, Rentfrow, & Guinn, 2003).

It may be simply too much of a risk, then, for LSEs to conclude that their partners' positive regard and love are genuine, secure, and enduring when they can easily think of personal weaknesses that will most assuredly come to light and jeopardize their acceptance (cf. Murray et al., 2006). The only past attempts that succeeded in making LSEs feel better about their relationships seem to have bypassed participants' self-evaluation concerns in one way or another (e.g., describing a value they shared with their partner, Lomore, Spencer, & Holmes, in press; focusing on a fault in their partner; Murray et al., 2005). The goal of the current research is to develop a cognitive reframing technique that LSEs could use to generalize from partner affirmations without activating potentially destructive self-evaluative processes.

In all studies, participants recalled a compliment that they had received from their romantic partner. We believed that LSEs would normally view compliments as relatively concrete, isolated, past events and would not make meaningful generalizations about how much they are valued. In the critical condition in each study, we induced participants to describe the compliment in an abstract fashion: They explained why their partner admired them, what the compliment meant to them, and what significance it had for their relationship. We expected the abstract manipulation to induce LSEs to form a more global interpretation of the compliment without engaging their relationship-damaging dependence regulation tactics. The novel aspect of our approach is that it helps LSEs to help themselves. It may be empowering for them to learn how to meaningfully reframe their partners' affirmations in order to assuage their doubts about their partners' love for them.

Overview of Experiments

In three experiments, participants first recalled a compliment that their romantic partner had paid them (which pilot testing suggested was not more difficult for LSEs than for HSEs). We then manipulated how they described the compliment. In Study 1, we tested whether an abstract description would indeed be more effective than a concrete description in making LSEs feel good about the positive feedback. In Study 2 we added a no-instructions control condition to clarify the direction of the abstraction effects and to examine SE differences in spontaneous descriptions of compliments. We also extended the dependent variables to include perceptions of relationship quality. In Study 3, we included a condition that encouraged participants to question whether they could rightfully apply an abstract generalization to the specific compliment they recalled, in contrast to instructing them to make the generalization, to investigate whether the mere suggestion of abstract meaning was sufficient to boost LSEs.

Study 1

In Study 1, we examined whether being instructed to describe a past compliment from their romantic partner in an abstract (vs. concrete) manner would make LSEs feel more positively about the compliment and consequently more valuable generally. We also

had participants think about the compliment again 2 weeks after the initial session to determine whether the effects of the cognitive reframing persisted. We did not expect the reframing manipulation to affect HSEs as much as LSEs. HSEs should be sufficiently confident in their partners' positive regard to generalize from signs of acceptance without experimental encouragement.

Method

Participants and Procedure

Fifty-three undergraduate students² (17 men and 36 women) in romantic relationships participated in a study of "Relationship Events" in exchange for course credit. Mean age was 19 years, and mean relationship length was 20 months. The majority of participants (42) indicated that they were in an "exclusive dating" relationship. Six individuals reported their relationship status as "casual dating," 2 were "living together," 1 was "engaged," and 2 were "married."

Between 1 and 4 participants reported for each session and were randomly assigned to a condition upon arrival. First, they completed an SE scale and some filler questionnaires. Next they were asked to think of a time their partner said something nice to them and to report the compliment with a few cue words. The manipulation instructions appeared on the next page; following the instructions, participants described the compliment in detail. They then answered several questions about the compliment itself and completed a measure of state SE. Finally, they answered some demographic questions.

At the end of the study, participants wrote down their e-mail address if they were interested in completing a brief follow-up questionnaire 2 weeks later for a chance to win a cash prize. Forty-nine agreed to be contacted and 33 returned the questionnaire via e-mail. Four were excluded from follow-up analyses because they had broken up with their partner since completing Part 1. Thus, the Part 2 sample included 29 participants (8 men and 21 women), or 55% of the original sample. The two samples did not differ on SE or on any of the dependent variables.

Part 1 Materials

Trait SE. Participants responded to the 10 Rosenberg (1965) SE items on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach's alpha was .93.³

² The initial sample included 70 participants, 17 of whom identified themselves as Asian when asked for their ethnicity. We decided to eliminate Asian participants from our analyses after discovering that they had significantly lower SE. We were concerned that the mean differences did not reflect more negative self-views but rather a different interpretation of the items on the scales (Heine, Lehman, Markus, & Kitayama, 1999). Asians were also excluded from analyses in Study 2 and were not selected for Study 3. Results were weaker, but generally in the same direction, if Asians were included in the analyses.

³ Participants also completed two attachment style questionnaires (an adapted version of Brennan, Clark, & Shaver's, 1998, Experience in Close Relationship Scale and Bartholomew & Horowitz's, 1991, four-category measure of attachment style) and a measure of perceived regard (Interpersonal Qualities Scale; Murray et al., 1996). These measures were included both for exploratory purposes and to prevent participants from focusing on the SE measure as our primary moderating variable. The attachment style questionnaires were also included in Studies 2 and 3. These scales did not yield strong or consistent results and so are not discussed further.

Compliment manipulation. All participants received the following instructions: "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 asked to write down a few cue words that would identify that memory to them, note how long ago it occurred, then turn to the next page to describe the compliment more fully.

In the concrete ($N = 25$) condition, participants were asked to "Describe exactly what your partner said to you. Include any details you can recall about where you two were at the time, what you were doing, what you were both wearing, etc." In the abstract condition ($N = 28$), participants were asked to "Explain why your partner admired you. Describe what it meant to you and its significance for your relationship." We portrayed the partners' positive behavior in terms of "said" (in the concrete condition) vs. "admired" (in the abstract condition) on the basis of Semin and Fiedler's (1988) linguistic category model (see also Semin & De Poot, 1997). In contrast to an action verb like "said," a state verb like "admired" implies that the behavior has lasted for a longer period and is more likely to recur in the future. We hoped that the use of a state verb would lead LSEs to perceive the compliments to be more broad and global in their implications about their value to their partners.

Compliment questions. Participants were asked how happy they felt when recalling the compliment, how far away the compliment felt, how significant it seemed now, and how much they attributed the compliment to something about their partner, and to the situation, all on 7-point scales.

Positive expectations. Three items assessed how likely participants thought it was that their partner would behave in various positive ways toward them in the future (e.g., "How likely is it that your partner would make an extra effort to spend time with you when his/her schedule was especially busy?"). The items were rated on a scale ranging from 1 (*extremely unlikely*) to 7 (*extremely likely*) and were averaged to form one index with $\alpha = .52$.

State SE. Participants indicated how they felt about themselves "right now, at this moment" on ten 7-point, bipolar adjective scales (e.g., *accepted-rejected*, *unimportant-important*). Items were reverse scored when appropriate and were averaged to create a measure of state SE ($\alpha = .94$; adapted from McFarland & Ross, 1982). State SE captures temporary fluctuations in self-evaluations caused by receipt of positive or negative information about the self, whereas trait SE, as measured by the Rosenberg Self-Esteem Scale in this study, captures average or typical self-evaluations across time (Heatherton & Polivy, 1991).

Part 2 Materials

All participants, regardless of the condition to which they had been assigned in Part 1, received the same instructions and questions 2 weeks later in Part 2. First, they were reminded that in the previous questionnaire they were asked to "Think of a time when your partner told you how much he/she liked something about you." Participants' cue words were inserted into their version of the questionnaire. Recall that these cue words were recorded prior to the manipulation, so there was no cue to elicit abstract meaning or concrete details presented here. They were then asked to "Briefly describe the event as you recall it now." Next they

answered four items about how they were currently feeling about the compliment. In addition to how happy the compliment made them feel, which they rated in Part 1, they also rated how secure, valuable, and proud the compliment made them feel in Part 2. Cronbach's alpha for the 4-item scale was .63. The correlations between all measured variables are presented in Table 1.

Part 1 and Part 2 Coding

Two independent coders, who were unaware of the conditions of the study, rated each compliment narrative according to how abstractly the participant described the compliment on a scale ranging from 1 (*only concrete details*) to 5 (*abstract meaning for relationship*). The coders' ratings were correlated at .72 for Part 1 and at .57 for Part 2 and were averaged to create a measure of abstraction for each narrative.

The Linguistic Inquiry and Word Count (LIWC) program (Pennebaker, Francis, & Booth, 2001) was used to assess the extent to which participants' descriptions of their partners' compliments included past and present tense verbs. The LIWC is a computerized text analysis program that yields percentages of total words falling under a particular category. We were especially interested in whether participants in the abstract condition would use more present tense and less past tense. This would suggest that they were seeing the compliment as an indication of their partner's continuing view of them as opposed to an isolated remark in the past. We recalculated the values yielded by the program to reflect percentage of total verbs, rather than total words, which were past or present tense.

Results

Part 1

For the analyses, all dependent variables were regressed on condition (abstract vs. concrete), SE, and the Condition \times SE interaction. Following Aiken and West (1996), condition was effect-coded and SE was centered to make the mean equal to zero. Condition was entered on the first step, and SE and the interaction term were entered on the second step. Simple effects were calculated at one standard deviation below the mean for LSE and one standard deviation above the mean for HSE. Temporal distance of the compliment ($M = 4.97$ months) was centered and included as a covariate.⁴

Coding of abstractness. There was a main effect of condition on abstraction ($\beta = .68$, $t(50) = 6.50$, $p < .01$). Coders rated the narratives in the abstract condition as more abstract ($M = 3.46$) than the narratives in the concrete condition ($M = 1.92$). The Condition \times SE interaction was not significant ($p > .55$). Both LSEs and HSEs heeded our instructions for describing the compliment.

Compliment questions. There was a main effect of condition, $\beta = .27$, $t(50) = 2.06$, $p < .05$, on happiness about the compliment. Participants in the abstract condition reported being happier about the compliment than did participants in the concrete condi-

⁴ There were no significant main effects of gender or any interactions between condition and gender on any of the dependent variables in any of the three studies. Thus, gender is not discussed further.

tion. Although the Condition \times SE interaction did not reach significance, $\beta = -.19$, $t(48) = -1.28$, $p = .20$, we explored simple effects pertinent to our investigation. The results are presented in Table 2. LSEs reported significantly greater happiness about the compliment in the abstract condition than in the concrete condition, $\beta = .43$, $t(48) = 2.04$, $p < .05$, whereas HSEs were equally happy in both conditions. The simple slope of SE was significant in the concrete condition, $\beta = .37$, $t(48) = 2.49$, $p < .05$, but not in the abstract condition ($\beta = -.02$, *ns*). As expected, LSEs felt happier when describing the compliment abstractly than when describing it concretely, as happy as HSEs felt in both conditions. The reliability of this effect may be questionable because of the nonsignificant overall interaction, but it is reassessed in the next two studies with a multiitem measure. There were no effects of condition or interactions on any of the other items assessing reactions to the compliment or on the measure of general positive expectations.

State SE. Would LSEs' increased happiness about their partners' admiration of a specific attribute translate to increased feelings of worth more generally? As with happiness about the compliment, for state SE there was a significant main effect of condition, $\beta = .31$, $t(50) = 2.35$, $p < .05$, as well as a main effect of SE, $\beta = .67$, $t(48) = 6.74$, $p < .01$, which were qualified by a marginal Condition \times SE interaction, $\beta = -.17$, $t(48) = -1.73$, $p < .10$ (see Table 2 for predicted values). LSEs reported higher state SE in the abstract condition than in the concrete condition, $\beta = .35$, $t(48) = 2.56$, $p < .05$, but HSEs did not differ between conditions. The simple slope of SE was significant in both the abstract condition, $\beta = .49$, $t(48) = 2.87$, $p < .01$, and the concrete condition, $\beta = .84$, $t(48) = 8.60$, $p < .01$. Thus, LSEs felt better about themselves more generally after describing a specific compliment from their romantic partner in an abstract, as opposed to concrete manner.

Verb tense. There were significant main effects of condition on proportion of verbs in present tense, $\beta = .45$, $t(50) = 3.58$, $p < .01$, and past tense, $\beta = -.47$, $t(50) = -3.86$, $p < .01$. Consistent with our predictions, participants used more present tense in the abstract condition than in the concrete condition ($M = 44.02\%$ vs. $M = 24.38\%$) and less past tense in the abstract condition than in the concrete condition ($M = 52.67\%$ vs. $M = 73.89\%$).

Part 2

The Part 2 sample included 15 participants from the abstract condition and 14 participants from the concrete condition. Both temporal distance of the compliment and time between Part 1 and

Table 2
Predicted Values for Concrete and Abstract Conditions at Low and High Self-Esteem (SE): Study 1

Dependent variable	Low SE		High SE	
	Concrete	Abstract	Concrete	Abstract
Part 1				
Happiness	5.45 _a	6.34 _b	6.23 _b	6.30 _b
State self-esteem	4.83 _a	5.50 _b	6.43 _c	6.44 _c

Note. Simple effects test were conducted comparing participants with low self-esteem (LSEs) in the concrete condition with LSEs in the abstract condition, participants with high self-esteem (HSEs) in the concrete condition with HSEs in the abstract condition, and LSEs with HSEs within each condition for each dependent variable. In each row, predicted scores for the cells that were compared that do not share subscripts differ at $p < .05$. Low and high SE were calculated at ± 1 SD.

Part 2 (range 13–28 days; $M = 16.21$) were controlled for in the analyses by centering them and including them as covariates.

Positive feelings. When reminded of the compliment they wrote about 2 weeks earlier and by using only the cue words they came up with prior to the manipulation, would we find any evidence that participants had reframed the compliments in their memories in accordance with the condition they had been assigned to in Part 1? Results revealed no main or interaction effects on participants' positive feelings about the event. However, internal analyses showed a marginally significant positive correlation between SE and positive feelings in the concrete condition ($r = .48$, $p < .09$) but not in the abstract condition ($r = .08$, *ns*), which is consistent with the simple effects we reported for happiness in Part 1; an SE difference existed in the concrete condition, which we would expect, but was eliminated by the abstract condition.

Coding. Participants who had been in the abstract condition in Part 1 continued to use more present tense, $\beta = .44$, $t(21) = 2.40$, $p < .05$ ($M = 36.18\%$), and less past tense, $\beta = -.42$, $t(21) = -2.34$, $p < .05$ ($M = 59.00\%$), in their narratives than did participants who had been in the concrete condition ($M = 11.56\%$ and $M = 85.41\%$, respectively). These findings suggest that the reframing of the compliments in Part 1 continued to influence participants' construal of the compliments 2 weeks later. There were no main or interaction effects on coders' ratings of abstractness for the Part 2 narratives.

Discussion

In Study 1, LSEs felt just as happy as HSEs about compliments from their romantic partners when they explained the meaning and significance of the compliments, rather than when they described the concrete details of exactly what was said and where. This had implications for how valuable they felt more generally; LSEs reported higher state SE in the abstract condition than in the concrete condition. The verb tense findings suggest one reason the manipulation was effective: Thinking of a partner's compliment as meaningful and significant may convey that it was the result of an ongoing experience as opposed to a one-time exclamation of praise. We were encouraged to discover that some of the differences between the concrete and abstract narratives were still evident when participants were reminded of the compliment 2 weeks

Table 1
Correlations Among Measured Variables: Study 1

Variable	1	2	3	4
Part 1				
1. Trait self-esteem	—			
2. Happiness	.33*	—		
3. State self-esteem	.79**	.58**	—	
Part 2				
4. Positive feelings	.36*	.50**	.42*	—

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

later and asked to describe it as they recalled it at that time. We reminded them by using their own cue words, which they generated prior to the manipulation in Part 1. Thus, the lasting differences in narrative structure provide preliminary support that we were able to reframe the meaning of the compliments in people's memories. Although some of the findings in Study 1 were weak, we were optimistic that recruiting larger samples and using more elaborate measures in Studies 2 and 3 would garner stronger support for our predictions.

Study 2

Study 2 included a no-instructions control condition that served two functions. The first was to assess the direction of the effects. On the basis of the results of Study 1, it is unclear whether the instructions to describe a romantic partner's compliment in an abstract manner made LSEs feel better about the compliment and themselves as we hypothesized or whether the concrete instructions made them feel worse. The second goal is to show that LSEs would typically (i.e., after no specific instructions) rate their partners' positive feedback less positively than would HSEs, consistent with our argument that they self-protectively avoid generalizing from signs of acceptance.

Study 2 also included questions assessing feelings about the relationships more generally. Our main hypothesis is that LSEs would rate their relationships more negatively than would HSEs (Murray et al. 1996, 2000), unless inspired to optimism by abstract instructions for describing partners' compliments. We did not expect HSEs' ratings to differ between conditions, given their tendency to spontaneously extract affirming meanings from positive feedback (Murray et al., 1998).

Method

Participants and Procedure

One hundred twenty-three introductory psychology students in romantic relationships participated in a two-part study of "Relationship Perceptions" in exchange for course credit. Four participants were excluded for not fully completing the materials. The remaining sample of 119 consisted of 19 men and 100 women. Mean age was 19 years, and mean relationship length was 17 months. The majority of participants (100) indicated that they were in an "exclusive dating" relationship. Six individuals reported their relationship status as "casual dating," 8 were "living together," 4 were "engaged," and 1 was "married."

The entire study was completed online. The manipulation of compliment abstraction was the same as in Study 1, except we added a control condition that received no specific instructions as to how to describe the compliment. Participants then answered several questions about the compliment and completed a measure of state SE. In this study we also included several questions about the relationship in general. The control condition made their relationship ratings prior to the compliment questionnaire to establish baseline measures of relationship quality, whereas the remaining participants (abstract and concrete conditions) made their relationship ratings after the compliment manipulation and questions. In Part 2, participants reported their thoughts and feelings about their relationship prior to being reminded of the compliment with their cue words from Part 1 (in Study 1, the cue words were presented immediately upon beginning the Part 2

questionnaire). We examined whether any increases in perceptions of relationship quality would endure for the abstract condition when the compliment was not salient.

All participants were sent the link to the Part 2 questionnaire approximately 2 weeks after they completed Part 1. The cue words they wrote to identify the compliment prior to the manipulation instructions in Part 1 were attached to their participant ID number and thus automatically inserted into their questionnaire when they logged on to Part 2. One hundred fifteen participants completed Part 2. Six were excluded from Part 2 analyses because they had broken up with their partner since completing Part 1. Thus, the Part 2 sample included 109 participants (15 men and 94 women), or 92% of the original sample.⁵ The two samples did not differ in SE. The Part 2 sample was higher initially in compliment positivity, felt security, and relationship valuing. However, these differences are completely accounted for by the participants who broke up with their partners since Part 1; they do not hold for participants who simply chose not to complete Part 2.

Part 1 Materials

Trait SE. SE was measured by the Rosenberg (1965) Self-Esteem Scale ($\alpha = .92$).

Compliment manipulation. As in Study 1, all participants were instructed to think of a time when their partner told them something they liked about them. They received different instructions about how to describe this compliment according to the condition to which they were randomly assigned. The concrete condition ($N = 35$) and the abstract condition ($N = 35$) were the same as in Study 1. The control condition ($N = 49$) was simply instructed to "Describe the event in the space below."⁶

Compliment questions. Participants responded to four items about how positively the compliment made them feel (happy, secure, valuable, and accepted) on scales ranging from 1 (*not at all*) to 7 (*extremely*). Two items assessed how abstractly they perceived the compliment ("How meaningful was this event to you?" "How significant was this event to your relationship?") on the same 7-point scales. Two items asked about participants' attributions for the compliment, that is, how deserving of it they felt (1 = *my partner just wanted to be nice to me*, 7 = *I was truly deserving*) and how sincere they thought their partner was (1 = *not at all*, 7 = *extremely*). Another two items assessed the frequency with which participants believed they received compliments ("How often does your partner say things like this?" 1 = *never*, 7 = *very often*) and the frequency with which they expected to receive compliments ("How likely is it that your partner would say something like this again in the future?" 1 = *extremely unlikely*,

⁵ In Study 1, one participation credit was awarded for completing Part 1, and participants were given the option of completing Part 2 for a chance to win a cash prize in a draw. Because of the low rate of return of Part 2 in Study 1 (62% of the sample), in Studies 2 and 3 we made the completion of both parts necessary to receive one credit.

⁶ Students were invited to participate in the study via e-mail. The unequal sample sizes across conditions reflect the differing response rates of students who had been randomly assigned to each condition (via the unique participant ID number included in their e-mail). They were not aware of which condition they would be in when they decided whether to participate.

7 = *extremely likely*). Cronbach's alpha for these four indices of compliment positivity were as follows: .92 for positive feelings, .64 for abstraction, .57 for attributions, and .75 for frequency.

Memory accessibility. This three-item scale ($\alpha = .85$) asked participants to rate how easily and quickly the compliment they wrote about came to mind when they were first asked to think of a specific example of a compliment (1 = *not at all*, 7 = *extremely*) and how detailed was their memory for it (1 = *very vague*, 7 = *very detailed*).

State SE. The same state SE measure was used as in Study 1 ($\alpha = .93$).

Relationship quality. Participants were instructed to consider "how you feel about your relationship right now." They responded to 19 statements on a scale of 1 (*not at all true*) to 7 (*completely true*), adapted from Murray et al. (2000, 2002). Responses to 12 statements were averaged to create a measure of felt security ($\alpha = .89$; e.g., "I am confident that my partner will always want to look beyond my faults and see the best in me," "Though times may change and the future is uncertain, I know my partner will always be ready and willing to offer me strength and support"). Responses to four statements were averaged to create a measure of participants' satisfaction with the relationship ($\alpha = .89$; e.g., "I am extremely happy with my current romantic relationship," "I have a very strong relationship with my partner"). Responses to three statements tapping commitment to the relationship were also averaged ($\alpha = .86$; e.g., "I am very committed to my relationship," "I see my relationship as a burden" [reverse scored]). Finally, participants indicated how confident they were that they would still be in a romantic relationship with their current partner at each of five specified time periods (6 months, 1 year, 2 years, 5 years, a lifetime). They rated each item on a scale from 1 (*extremely uncertain*) to 7 (*extremely certain*). The alpha for this five-item future optimism scale was .94.

Part 2 Materials

All participants, regardless of the condition they had been assigned to in Part 1, received the same instructions and questions in Part 2. They responded to questions about their relationship in general before being reminded of the compliment to determine whether the manipulation in Part 1 might cause lasting changes in their perceptions of relationship quality.

Frequency of positive partner behavior. Participants were instructed to "think about what has happened in your relationship in the last 2 weeks (since you completed the first part of this study)." Using a 5-point scale (1 = *not at all*, 5 = *many times*), they rated the frequency of four positive partner behaviors (e.g., "told you how much he/she cares about you," "supported or encouraged you") and four negative behaviors (e.g., "criticized you," "acted inconsiderately toward you"). We reverse scored the negative items and averaged all eight responses to form a measure of positive partner behavior ($\alpha = .81$).

Relationship quality. Part 2 included seven of the felt security statements from Part 1 ($\alpha = .89$) and two each from the commitment and satisfaction scales ($\alpha = .75$ and $\alpha = .93$, respectively).

Compliment questions. After being reminded of the compliment by using their cue words and briefly describing the compliment as they now recalled it, participants rated several items according to how they now felt about the compliment. We used the

same four-item positive feelings index as in Part 1 ($\alpha = .87$). The abstraction index included the meaning and significance items from Part 1 and one additional item: "How broad was your partner's praise for you?" This was rated on a scale ranging from 1 (*about my behavior only*) to 7 (*about me as a person*). The alpha for this abstraction scale was .72.

Part 1 and Part 2 Coding

As in Study 1, trained coders who were unaware of condition rated how abstract the narratives seemed to them. The coders' ratings were correlated at .51 for Part 1 and .66 for Part 2 and were averaged to create a measure of abstraction for each narrative. We also assessed the percentage of verbs in each narrative that were present tense and past tense by using the LIWC program (Pennebaker et al., 2001).

Results

Part 1

We created two composite variables to simplify reporting of the numerous dependent variables. Preliminary analyses showed similar patterns of effects on each subscale described under compliment questions and under relationship quality. An overall "compliment positivity" composite ($\alpha = .84$) was created by averaging standardized scores for each of the four indices of compliment questions (positive feelings, abstraction, attributions, and frequency). A "relationship valuing" composite ($\alpha = .93$) was created by averaging the standardized scores for commitment, satisfaction, and future optimism. We kept the felt security index of relationship quality separate because it is a theoretically distinct construct (Murray et al., 2006). We expected that feeling more positively about the compliment would lead to increased felt security, which would then increase relationship valuing for LSEs.

As in Study 1, all dependent variables were regressed on effect-coded condition (abstract, concrete, or control), SE, and the Condition \times SE interaction. Temporal distance of the compliment ($M = 3.31$ months) was included as a covariate. On the basis of the findings of Study 1 and other research described earlier, we hypothesized that LSEs would be more negative than HSEs on all dependent variables in both the control and concrete conditions but not in the abstract condition. Furthermore, we expected that LSEs in the abstract condition would be significantly more positive than LSEs in either the control condition or the concrete condition. Unless indicated, there were no differences between conditions among HSEs on any of the dependent variables examined in this study.

The correlations between measured variables are presented in Table 3, and the predicted values for the various analyses are reported in Table 4. A graph is presented (Figure 1) only for felt security, which we believe to be the most important finding in this study. However, the pattern of means in Figure 1 is quite similar to the pattern of means for the other dependent variables and thus may be viewed as a prototypical finding to aid in understanding the information in Table 4.

Coding of abstractness. As in Study 1, there was a main effect of condition on coders' ratings of abstraction, $\beta = .56$, $t(115) = 5.61$, $p < .01$, and $\beta = -.46$, $t(115) = -4.59$, $p < .01$, but this

Table 3
Correlations Among Measured Variables: Study 2

Variable	1	2	3	4	5	6	7	8	9	10
Part 1										
1. Trait self-esteem	—									
2. Compliment positivity	.20*	—								
3. Memory accessibility	.19*	.43**	—							
4. State self-esteem	.63**	.43**	.33**	—						
5. Felt security	.28**	.64**	.42**	.48**	—					
6. Relationship valuing	.11	.61**	.35**	.40**	.71**	—				
Part 2										
7. Compliment positivity	.07	.63**	.42**	.34**	.43**	.47**	—			
8. Frequency of positive partner behavior	.25**	.42**	.48**	.46**	.51**	.55**	.52**	—		
9. Felt security	.37**	.50**	.43**	.59**	.70**	.56**	.63**	.72**	—	
10. Relationship valuing	.11	.45**	.42**	.43**	.48**	.73**	.57**	.71**	.69**	—

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

was qualified by a Condition \times SE interaction, $\beta = -.28$, $t(112) = -2.99$, $p < .01$. LSEs wrote more abstract narratives in the abstract condition than in either the control condition, $\beta = .54$, $t(112) = 5.11$, $p < .01$, or the concrete condition, $\beta = .78$, $t(112) = 5.71$, $p < .01$, and even more abstract narratives than HSEs in the abstract condition, $\beta = -.41$, $t(112) = 2.87$, $p < .01$. HSEs' narratives were significantly less abstract in the concrete condition than in either the control condition, $\beta = -.27$, $t(112) = -2.14$, $p < .05$, or the abstract condition, $\beta = -.38$, $t(112) = 2.95$, $p < .01$, which did not differ from each other.

Compliment positivity. A significant main effect of condition, $\beta = .31$, $t(115) = 2.86$, $p < .01$, was qualified by a Condition \times SE interaction, $\beta = -.32$, $t(112) = -3.22$, $p < .01$, on compliment positivity. In the control condition, when given no specific instructions about how to think about and describe the compliment, LSEs reported feeling significantly worse about the compliment than did HSEs, $\beta = .50$, $t(112) = 3.60$, $p < .01$. LSEs in the abstract condition were significantly more positive than were LSEs in either the control condition, $\beta = .64$, $t(112) = 4.82$, $p < .01$, or the concrete condition, $\beta = .41$, $t(112) = 2.84$, $p < .01$, which did

not differ from each other. In fact, in the abstract condition, LSEs viewed the compliments as positively as did HSEs ($\beta = -.25$, ns). Thus, consistent with our hypotheses, LSEs were typically less inclined than were HSEs to make much of their partners' compliments, but they viewed the compliments as positively as did HSEs after describing their abstract meaning and significance.

Memory accessibility. A marginal main effect of SE, $\beta = .17$, $t(112) = 1.91$, $p < .06$, was qualified by a significant Condition \times SE interaction, $\beta = -.27$, $t(112) = -2.65$, $p < .01$, on memory accessibility. LSEs reported lower accessibility than did HSEs in both the control condition, $\beta = .32$, $t(112) = 2.22$, $p < .05$, and the concrete condition, $\beta = .35$, $t(112) = 2.22$, $p < .05$. LSEs reported higher accessibility in the abstract condition than in either the control condition, $\beta = .45$, $t(112) = 3.26$, $p < .01$, or the concrete condition, $\beta = .28$, $t(112) = 1.91$, $p < .06$. In the abstract condition, LSEs did not differ from HSEs in reported ease of retrieving the memory ($\beta = -.17$, ns). Note that all participants were asked to come up with a specific compliment from their partner prior to the manipulation. LSEs tended to recall that process as more difficult than did HSEs unless they had been

Table 4
Predicted Values for Control, Concrete, and Abstract Conditions at Low and High Self-Esteem (SE): Study 2

Dependent variable	Low SE			High SE		
	Control	Concrete	Abstract	Control	Concrete	Abstract
Part 1						
Compliment positivity	-.47 _a	-.12 _a	.49 _b	.23 _b	.08 _{ab}	.15 _b
Memory accessibility	4.78 _a	5.25 _a	6.08 _b	5.64 _b	6.15 _b	5.64 _b
State self-esteem	4.54 _a	4.84 _{ab}	5.20 _b	6.14 _c	6.30 _c	6.10 _c
Felt security	5.24 _a	5.04 _a	6.23 _b	6.18 _b	5.94 _b	5.93 _b
Relationship valuing	-.24 _a	-.43 _a	.53 _b	.10 _a	.03 _a	.13 _{ab}
Abstraction (coded)	1.86 _{ac}	1.49 _a	3.49 _b	2.28 _c	1.59 _a	2.55 _c
Past tense	67.27 _a	65.66 _a	37.44 _b	51.87 _a	61.40 _a	58.90 _a
Present tense	32.11 _a	32.49 _a	58.12 _b	42.83 _a	36.35 _a	38.94 _a
Part 2						
Frequency of positive partner behavior	3.79 _a	3.66 _a	4.32 _b	4.25 _b	4.36 _b	4.28 _b
Felt security	5.49 _a	5.16 _a	6.34 _b	6.49 _b	6.42 _b	6.46 _b

Note. Simple effects test were conducted comparing differences between conditions at low self-esteem (LSE), differences between conditions at high self-esteem (HSE), and LSEs with HSEs within each condition, for each dependent variable. In each row, predicted scores for the cells that were compared that do not share subscripts differ at $p \leq .05$. Low and high SE were calculated at $\pm 1 SD$.

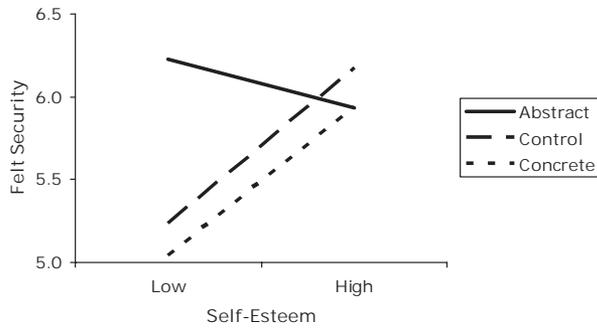


Figure 1. Felt security as a function of condition and self-esteem (\pm SD): Study 2

subsequently instructed to describe the meaning and significance of the compliment.

State SE. As in Study 1, the significant main effect relation between trait SE and state SE, $\beta = .62$, $t(112) = 8.70$, $p < .01$, was qualified by a marginally significant Condition \times SE interaction, $\beta = -.16$, $t(112) = -1.89$, $p = .06$. It is not surprising that LSEs reported lower state SE than did HSEs in all conditions: for the control condition, $\beta = .75$, $t(112) = 6.33$, $p < .01$; for the concrete condition, $\beta = .69$, $t(112) = 5.43$, $p < .01$; for the abstract condition, $\beta = .43$, $t(112) = 3.39$, $p < .01$. Most pertinent to our hypotheses, however, LSEs reported significantly higher state SE in the abstract condition than in the control condition, $\beta = .28$, $t(112) = 2.51$, $p < .05$. The concrete condition fell in between and was not significantly different from the other two conditions ($ps > .20$, ns). Thus, thinking about a specific compliment from their partner in an abstract manner did have implications for how valuable LSEs felt more generally.

Felt security. Could LSEs take this abstract compliment further? In addition to making them feel better about the compliment and about themselves, would reframing compliments abstractly make LSEs feel more secure in their relationships? Indeed, the main effects of condition, $\beta = .27$, $t(115) = 2.42$, $p < .05$, and of SE, $\beta = .27$, $t(112) = 3.17$, $p < .01$, were qualified by a Condition \times SE interaction, $\beta = -.34$, $t(112) = -3.48$, $p < .01$ (Figure 1). As usual, LSEs reported feeling less secure about their relationship than did HSEs in both the control condition, $\beta = .48$, $t(112) = 3.48$, $p < .01$, and the concrete condition, $\beta = .47$, $t(112) = 3.14$, $p < .01$. In the abstract condition, however, they felt just as secure as did HSEs ($\beta = -.15$, ns), and more secure than LSEs in either of the other two conditions: for control comparison, $\beta = .46$, $t(112) = 3.52$, $p < .01$; for concrete comparison, $\beta = .56$, $t(112) = 3.87$, $p < .01$. Recall that participants in the control condition completed the relationship ratings prior to describing a compliment. So, these results demonstrate that for LSEs, simply thinking about positive feedback from their romantic partner (in a concrete way) is not sufficient to raise their felt security from baseline. They need to be encouraged to think of the feedback in a more abstract, meaningful way.

Relationship valuing. Feeling insecure in their romantic relationship typically leads LSEs to devalue the relationship (Murray et al., 2000). After boosting their felt security, then, would we see a corresponding increase in how positively they perceived their relationship? As with felt security, on the relationship valuing

composite there was a main effect of condition, $\beta = .29$, $t(115) = 2.58$, $p = .01$, qualified by a Condition \times SE interaction, $\beta = -.25$, $t(112) = -2.39$, $p < .05$. LSEs were more positive about their relationship in the abstract condition than in either the control condition, $\beta = .40$, $t(112) = 2.87$, $p < .01$, or the concrete condition, $\beta = .51$, $t(112) = 3.31$, $p < .01$. No other simple effects reached significance. Thinking about a partner's compliment abstractly led LSEs to not only feel more secure, but also to value the relationship more highly.

Mediation. We conducted three mediational analyses pertinent to our theoretical model to investigate how the Condition \times SE interaction affected the dependent variables (following Sobel, 1982). Consistent with expectations, we found that the interaction effect (a) on state SE was mediated by compliment positivity ($z = -2.58$, $p < .01$), (b) on felt security was also mediated by compliment positivity ($z = -2.95$, $p < .01$), and (c) on relationship valuing was mediated by felt security ($z = -3.29$, $p < .01$).⁷ These analyses indicate that for LSEs, describing positive feedback from their romantic partner in an abstract manner led them to perceive the feedback more positively, which raised their state SE and made them feel more secure in the relationship. This increased sense of security, in turn, allowed them to be more generous in their conclusions about their relationship and evaluate it more positively.

Verb tense. We were particularly interested in determining whether in the control condition, LSEs would spontaneously describe past compliments from their romantic partners as "more past"—that is, using more past tense and less present tense—than would HSEs. As expected, analyses revealed main effects of condition on both past tense verbs, $\beta = -.26$, $t(114) = -2.32$, $p < .05$, and present tense verbs, $\beta = .25$, $t(115) = 2.26$, $p < .05$, which were both qualified by Condition \times SE interactions: for past, $\beta = .31$, $t(111) = 3.05$, $p < .01$; for present, $\beta = -.28$, $t(111) = -2.65$, $p < .01$. When LSEs were given no specific instructions on how to describe a compliment from their romantic partner (control condition), they used marginally more past tense verbs than did HSEs, $\beta = -.28$, $t(111) = -1.90$, $p = .06$. They also tended to use fewer present tense verbs, though not significantly so ($p = .18$). LSEs used fewer past tense verbs and more present tense verbs in the abstract condition than in the control condition (past: $\beta = -.50$, $t[111] = -3.59$, $p < .01$; present, $\beta = .46$, $t[111] = 3.22$, $p < .01$) or the concrete condition (past: $\beta = -.48$, $t[111] = -3.15$, $p < .01$; present: $\beta = .45$, $t[111] = 2.94$, $p < .01$). In fact, even compared with HSEs in the abstract condition, LSEs used fewer past tense verbs, $\beta = .39$, $t(111) = 2.54$, $p < .05$, and more present tense verbs, $\beta = -.37$, $t(111) = -2.34$, $p < .05$. Thus, with no specific instructions for describing positive feedback from their partners, LSEs tended to dismiss the feedback as being more in the past than did HSEs. The compli-

⁷ Baron and Kenny's (1986) four requirements for mediation were also met for each mediation analysis in both Study 2 and Study 3: There was a significant relationship between the independent variable (the Condition \times Self-Esteem 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.

ments LSEs nominated were not actually any farther in the past, however—the correlation between SE and temporal distance of the compliment was $-.01$. When instructed to describe the more abstract meaning and significance of the compliments, LSEs wrote about them more presently—more so even than did HSEs.

Part 2

The Part 2 sample included 33 participants from the abstract condition, 32 from the concrete condition, and 44 from the control condition. As in Part 1, we created composite measures for compliment positivity (positive feelings and abstraction; $\alpha = .87$) and relationship valuing (satisfaction and commitment; $\alpha = .92$). Both the temporal distance of the compliment and days between Part 1 and Part 2 ($M = 16.40$ days) were controlled for in the regression analyses.

Felt security. By placing the general relationship questions at the beginning of the Part 2 questionnaire, we tested whether the increase in felt security for LSEs in the abstract condition would remain over time when the specific compliment that caused the increase was not immediately salient. Indeed, the pattern of results was identical to that for felt security in Part 1. There were main effects of condition, $\beta = .28$, $t(104) = 2.39$, $p < .05$, and SE, $\beta = .41$, $t(101) = 4.73$, $p < .01$, which were qualified by a Condition \times SE interaction, $\beta = -.30$, $t(101) = -2.98$, $p < .01$. LSEs who had been in the abstract condition in Part 1 were still feeling as secure as were HSEs ($\beta = .05$, *ns*) and more secure than LSEs who had been in the control condition, $\beta = .41$, $t(101) = 3.11$, $p < .01$, or the concrete condition, $\beta = .56$, $t(101) = 3.82$, $p < .01$. The simple effect of SE was significant in both of these conditions: control condition, $\beta = .52$, $t(101) = 3.70$, $p < .01$; concrete condition, $\beta = .65$, $t(101) = 4.15$, $p < .01$. There were no significant effects on the relationship valuing composite in Part 2.

Frequency of positive partner behavior. If LSEs came away from the first part of this study feeling more highly valued by their romantic partners, would they then allow themselves to be more attentive to other positive behaviors and less attentive to negative behaviors from their partners? Indeed this is what is suggested by our findings on the measure of frequency of positive partner behavior. There were main effects of condition, $\beta = .23$, $t(104) = 1.95$, $p = .05$, and SE, $\beta = .29$, $t(101) = 3.19$, $p < .01$, qualified by a Condition \times SE interaction, $\beta = -.26$, $t(101) = -2.46$, $p < .05$. LSEs reported lower frequencies of positive behavior from their partners than did HSEs when they had been in either the control condition, $\beta = .36$, $t(101) = 2.42$, $p < .05$, or the concrete condition, $\beta = .53$, $t(101) = 3.21$, $p < .01$, in Part 1. LSEs reported just as high frequencies as did HSEs when they had been in the abstract condition ($\beta = -.02$, *ns*) and significantly higher frequencies than LSEs who had been in either of the other two conditions: control condition, $\beta = .38$, $t(101) = 2.65$, $p < .01$; concrete condition, $\beta = .46$, $t(101) = 2.91$, $p < .01$.

Compliment positivity. There was only a main effect of condition on the compliment positivity composite in Part 2, $\beta = .37$, $t(101) = 3.27$, $p < .05$. Participants who had described a compliment abstractly in Part 1 still felt more positively about it ($M = .36$) than those who had described it concretely, $M = -.14$, $\beta = .29$, $t(101) = 2.61$, $p = .01$, or those who were in the control condition, $M = -.18$, $\beta = .32$, $t(101) = 3.12$, $p < .01$.

Mediation. The Condition \times SE interaction on positive partner behavior was mediated by felt security ($z = -2.82$, $p < .01$). For LSEs, then, the increase in felt security accrued from describing compliments abstractly led them to perceive greater frequency of other types of positive behaviors (and lower frequency of negative behaviors) in the 2–3 weeks since that abstract description. Feeling more secure about their partners' regard for them, LSEs were more willing to generalize signs of acceptance and minimize signs of rejection.

Coding. There were no significant effects on coders' ratings of how abstract were the narratives or on the use of present and past tense verbs. One reason the finding on verb tense in Part 2 of Study 1 may not have replicated here is that in Study 1, writing about the compliment was the first thing participants did in Part 2. In Study 2, we asked them to answer a number of questions about their relationship prior to being reminded of the compliment, which may have washed out any further effects of the manipulation.

Discussion

Study 2 replicated and extended the findings of Study 1 in several ways. The main findings of Study 1 were that among LSEs, abstract compliment framing increased happiness and state SE as compared with concrete compliment framing. In Study 2, an added control condition showed that LSEs were typically less enthusiastic about compliments from their romantic partners, reported more difficulty in remembering the compliments, and described them by using more past tense verbs than did HSEs. When given instructions to describe the concrete details of the compliment, LSEs did not budge from their typical stance. When instructed to describe the feedback more abstractly, in terms of its meaning and significance, LSEs reported increased positive feelings, reported greater ease in recalling the feedback, and used present tense more often. In the abstract condition, LSEs did not differ significantly from the usually more buoyant HSEs on these measures.

It is important that remembering one specific compliment more abstractly had far-reaching consequences for LSEs. It increased their state SE and sense of relationship security, which encouraged them to offer more positive evaluations of the relationship in general. It is impressive that some of these changes persisted over 2 weeks. LSEs who had been in the abstract condition in Part 1 continued to report increased felt security relative to other LSEs in Part 2. They also recalled more frequent positive and less frequent negative behaviors from their romantic partners during the intervening time period. The short and simple abstraction exercise appeared to make LSEs feel significantly better about their relationships 2 weeks later.

One remaining question to be addressed by future research is why LSEs reported more positive partner behavior since the first session of the study. We can think of three possible explanations: LSEs construed their partners' behavior more positively only when they were asked to look back on it, they actually perceived more positive behavior throughout the 2 weeks, or they in fact elicited more positive behavior from their partner during that time period. If they finished the first session of the study feeling happier about their relationship, they may have gone on to behave in warmer, kinder ways toward their partner, who in turn may have treated them better. Obtaining daily diaries and partner reports during this 2-week span could help disentangle these intriguing possibilities.

Study 3

Given how difficult it has been for past researchers to make LSEs feel more optimistic about anything, why was our abstraction manipulation so effective? We propose that the key is the subtlety of the manipulation. We think that it worked because it managed to assumptively imply that the compliment must have been meaningful and significant, which avoided activating LSEs' doubts about their value to their partners. If LSEs had been explicitly provided with an opportunity to question the broader meaning and significance of the feedback, their self-evaluative worries would likely have undermined their enjoyment of the compliment. We tested this proposal in Study 3. Our hypothesis is that LSEs would feel more positively about a compliment from their partner, about themselves, and about their relationship when they were instructed to describe the compliment abstractly but not when they were instructed to reflect on the question of whether it should be considered abstract. Further, we expected the LSEs would rate their partners' positive feedback and the relationship in general more negatively than would HSEs in the control and question conditions, but they would be just as positive as HSEs in the abstract condition. In accordance with the research reviewed in this article and with our earlier findings, we did not expect HSEs' ratings to differ between conditions.

Method

Participants and Procedure

Ninety-one undergraduate students in romantic relationships participated in a two-part study of "Relationship Perceptions" in exchange for credit for their introductory psychology course. One participant was excluded for not completing the materials. The remaining sample of 90 consisted of 39 men and 51 women. Mean age was 20 years, and mean relationship length was 21 months. The majority of participants (71) indicated that they were in an "exclusive dating" relationship. Seven individuals reported their relationship status as "casual dating," 6 were "living together," 2 were "engaged," and 4 were "married."

Eighty-five participants completed Part 2. Two participants were excluded from Part 2 analyses, 1 for failing to complete the materials properly and 1 for having broken up with her partner since completing Part 1. Thus, the Part 2 sample included 83

participants (35 men and 48 women) or 92% of the original sample. The two samples did not differ on SE or on any of the dependent variables. The study was conducted online, and the procedure was identical to Study 2.

Materials

All materials, for Parts 1 and 2, were identical to Study 1, with two exceptions. Memory accessibility was not assessed in this study, and we replaced the concrete condition with a question condition.

As in Studies 1 and 2, all participants were first instructed to think of a time when their partner told them something they liked about them. They were randomly assigned to one of three conditions. The control condition ($N = 29$) and the abstract condition ($N = 27$) were the same as Study 2. The question condition ($N = 34$) differed very subtly from the abstract condition. Whereas the abstract condition instructed participants to "Explain why your partner admired you. Describe what it meant to you and its significance for your relationship," the question condition instructed participants to "Explain whether you think what your partner said indicated that he/she admired you. Consider whether it was meaningful to you and significant for your relationship." Thus, the same terms were used (admired, meaningful, and significant), but they were posed as questions rather than implied as assumptions by the instructions.

Results

Part 1

As in Studies 1 and 2, all dependent variables were regressed on effect-coded condition (abstract, question, or control), SE, and the Condition \times SE interaction. Temporal distance of the compliment ($M = 4.69$ months) was included as a covariate. As with Study 2, there were no condition differences for HSEs unless indicated.

The correlations between measured variables are presented in Table 5, and the predicted values for the various analyses are reported in Table 6. As in Study 2, only the graph for felt security is presented (Figure 2). The pattern of means in Figure 2 is so similar to the pattern of means for the other dependent variables in

Table 5
Correlations Among Measured Variables: Study 3

Variable	1	2	3	4	5	6	7	8	9
Part 1									
1. Trait self-esteem	—								
2. Compliment positivity	.22*	—							
3. State self-esteem	.48**	.61**	—						
4. Felt security	.24*	.70**	.63**	—					
5. Relationship valuing	.17	.64**	.60**	.84**	—				
Part 2									
6. Compliment positivity	.12	.75**	.38**	.59**	.56**	—			
7. Frequency of positive partner behavior	.04	.48**	.32**	.57**	.56**	.62**	—		
8. Felt security	.27*	.64**	.57**	.82**	.76**	.64**	.70**	—	
9. Relationship valuing	.19	.59**	.54**	.75**	.80**	.64**	.67**	.86**	—

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

Table 6
Predicted Values for Control, Question, and Abstract Conditions at Low and High Self-Esteem (SE): Study 3

Dependent variable	Low SE			High SE		
	Control	Question	Abstract	Control	Question	Abstract
Part 1						
Compliment positivity	-0.62 _a	-0.24 _a	0.34 _a	-0.02 _{ab}	0.56 _b	-0.12 _{ab}
State self-esteem	5.05 _a	5.16 _a	5.87 _b	6.31 _b	6.10 _b	6.13 _b
Felt security	4.96 _a	5.33 _a	6.03 _b	5.82 _{ab}	6.25 _b	5.81 _{ab}
Relationship valuing	-0.51 _a	-0.20 _a	0.34 _a	-0.11 _a	0.54 _b	0.06 _{ab}
Part 2						
Felt security	5.06 _a	5.64 _a	6.26 _b	6.36 _{ab}	6.64 _b	5.98 _b
Relationship valuing	-0.31 _{ab}	-0.40 _a	0.43 _b	-0.07 _b	0.48 _b	0.05 _b
Frequency of positive partner behavior (positive only)	3.14 _a	4.01 _b	4.21 _b	4.10 _{ab}	4.37 _{ab}	3.87 _{ab}

Note. Simple effects test were conducted comparing differences between low self-esteem (LSE) conditions, differences between high self-esteem (HSE) conditions, and participants with low self-esteem with participants with high self-esteem within each condition for each dependent variable. In each row, predicted scores for the cells that were compared that do not share subscripts differ at $p \leq .05$. Low and high SE were calculated at ± 1 SD.

this study that it may be viewed as a prototypical finding to aid in understanding the information in Table 6.

Coding of abstractness. The correlation between coders' ratings of the abstractness of the compliment narratives was .57. There was a main effect of condition on abstraction, $\beta = .36$, $t(86) = 3.58$, $p < .01$, and $\beta = .36$, $t(86) = 3.64$, $p < .01$, respectively, but there was no interaction ($p > .30$). Participants in the abstract condition wrote more abstract narratives ($M = 3.39$) than did those in the control condition, $M = 1.79$, $\beta = .62$, $t(86) = 6.07$, $p < .01$, but not more than did participants in the question condition ($M = 3.47$). Participants in the question condition also wrote more abstract narratives than did participants in the control condition, $\beta = .64$, $t(86) = 6.47$, $p < .01$.

Compliment positivity. We expected to replicate the finding from Study 2 that LSEs would be more enthusiastic about past positive feedback from their partner when they were instructed to describe it in an abstract manner as compared with when they were given no specific instructions. We did not expect the question condition—in which abstract meaning and significance were suggested but not assumed—to provide the same boost. A marginal main effect of SE, $\beta = .24$, $t(83) = 1.89$, $p < .07$, was qualified by a Condition \times SE interaction on the compliment positivity composite, $\beta = -.25$, $t(83) = -2.22$, $p < .05$. As expected, LSEs were less positive about the compliment than were HSEs in the

question condition, $\beta = .38$, $t(83) = 2.63$, $p = .01$, and somewhat less in the control condition, $\beta = .48$, $t(83) = 1.58$, $p = .12$, but not in the abstract condition ($\beta = -.13$, *ns*). As well, LSEs tended to report more positive thoughts and feelings about the compliment in the abstract condition than in the control condition or the question condition, although the simple effects were not significant ($ps > .17$). Thus, asking LSEs to consider whether a compliment from their partner was meaningful and significant did not have the same benefit as instructing them to describe the meaning and significance.

State SE. Consistent with Studies 1 and 2, there were main effects of condition, $\beta = -.31$, $t(86) = -2.56$, $p < .05$, and SE, $\beta = .51$, $t(83) = 4.51$, $p < .01$, that were qualified by a Condition \times SE interaction, $\beta = -.23$, $t(83) = -2.33$, $p < .05$, on state SE. LSEs reported lower state SE than did HSEs in the control condition, $\beta = .78$, $t(83) = 2.93$, $p < .01$, and the question condition, $\beta = .58$, $t(83) = 4.58$, $p < .01$, but not in the abstract condition ($\beta = .16$, *ns*). LSEs who were in the abstract condition reported higher state SE than did LSEs who were in the control condition, $\beta = .46$, $t(83) = 2.24$, $p < .05$, and in the question condition, $\beta = .40$, $t(83) = 3.02$, $p < .01$.

Felt security. As with Study 2, we expected that LSEs who were instructed to reframe their partners' compliments abstractly would be able to internalize this praise and feel more valued by their partner generally. We did not think that LSEs who were encouraged to consider whether their partner's praise might indicate that they admired them would have a corresponding increase in felt security. A main effect of SE, $\beta = .26$, $t(83) = 2.04$, $p < .05$, was qualified by a Condition \times SE interaction, $\beta = .25$, $t(83) = 2.28$, $p < .05$ (Figure 2). LSEs in the abstract condition felt significantly more secure in their relationship than did LSEs in either the control condition (who made their ratings prior to recalling a compliment), $\beta = .49$, $t(83) = 2.11$, $p < .05$, or the question condition, $\beta = .33$, $t(83) = 2.18$, $p < .05$. In fact, LSEs felt just as secure as did HSEs in the abstract condition ($\beta = -.12$, *ns*). The simple effect of SE was significant in the question condition, $\beta = .46$, $t(83) = 3.27$, $p < .01$. So, LSEs who were instructed to describe their partners' compliments abstractly felt more secure about their partners' regard than they typically did (control condition), but LSEs who were asked to evaluate whether

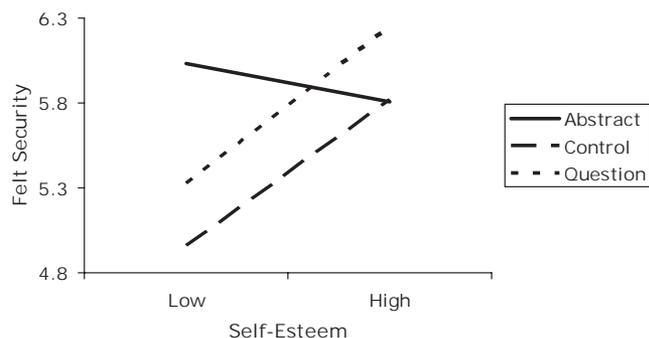


Figure 2. Felt security as a function of condition and self-esteem (± 1 SD): Study 3

their partners' compliments had abstract meaning and significance did not experience a boost to felt security.

Relationship valuing. The Condition \times SE interaction on the composite measure of relationship valuing was significant, $\beta = -.21$, $t(83) = -1.96$, $p = .05$. LSEs in the abstract condition valued their relationship marginally more than did LSEs in the control, $\beta = .44$, $t(83) = 1.91$, $p < .06$, and question conditions, $\beta = .29$, $t(83) = 1.92$, $p < .06$. Unexpectedly, HSEs were significantly more positive about their relationship in the question condition than in the control condition, $\beta = .37$, $t(83) = 2.07$, $p < .05$. The simple effect of SE was significant only in the question condition, $\beta = .43$, $t(83) = 3.05$, $p < .01$. Thus, LSEs in the abstract condition valued their relationships more than did LSEs in the other two conditions. The finding for HSEs we suspect to be a compensatory reaction to a perceived threat; we save further explanation of this effect for the discussion.

Mediation. We conducted the same mediation analyses that we did for Study 2. For LSEs, describing positive feedback from their romantic partner in an abstract manner led them to perceive the feedback more positively, which raised their state SE ($z = -2.11$, $p < .05$) and made them feel more secure in the relationship ($z = -2.15$, $p < .05$). This increased sense of security, in turn, allowed them to make more generous conclusions about the relationship by evaluating it more positively ($z = -2.25$, $p < .05$).

Verb tense. Unlike Study 2, there were only main effects of condition on verb tenses. The conditions differed in their proportion of both past tense verbs, $\beta = -.30$, $t(86) = -2.58$, $p < .05$, and present tense verbs, $\beta = .30$, $t(86) = 2.58$, $p < .05$. Specifically, participants in the control condition used more past tense verbs ($M = 62.1\%$) than did those in the abstract condition, $M = 44.1\%$, $\beta = .45$, $t(86) = 3.74$, $p < .01$, or the question condition, $M = 43.0\%$, $\beta = .36$, $t(86) = 3.28$, $p < .01$. As well, participants in the control condition used fewer present tense verbs ($M = 33.3\%$) than did those in the abstract, $M = 55.3\%$, $\beta = -.46$, $t(86) = -3.93$, $p < .01$, and question conditions, $M = 54.9\%$, $\beta = -.40$, $t(86) = -3.70$, $p < .01$. Although participants in the question condition generally reported less positive outcomes than did participants in the abstract condition, their narratives indicated that they were at least considering the compliments in as present terms.

Part 2

The Part 2 sample included 26 participants from the abstract condition, 24 from the control condition and 33 from the question condition. The time interval between Parts 1 and 2 ranged from 12 to 24 days ($M = 15.93$).

Felt security. A main effect of SE, $\beta = .34$, $t(75) = 2.35$, $p < .05$, and a Condition \times SE interaction, $\beta = -.32$, $t(75) = -2.72$, $p < .01$, yielded a similar pattern of results as in Part 1. LSEs who had been in the abstract condition in Part 1 continued to report greater felt security than did LSEs who had been in the control, $\beta = .56$, $t(75) = 2.07$, $p < .05$, and question conditions, $\beta = .29$, $t(75) = 1.94$, $p = .05$. In the abstract condition LSEs did not differ significantly from HSEs ($\beta = -.15$, *ns*), whereas LSEs were marginally less secure than HSEs in the control condition, $\beta = .66$, $t(75) = 1.80$, $p < .08$, and significantly less in the question condition, $\beta = .51$, $t(75) = 3.58$, $p < .01$, which we would typically expect. So, 2 weeks after writing about the abstract

meaning and significance of a compliment from their romantic partner, LSEs continued to feel more positively regarded by their partner in general, as indexed by their felt security, than did LSEs who were made to question the meaning and significance of the compliment or given no instructions about what to write.

Relationship valuing. The Condition \times SE interaction on relationship valuing was significant, $\beta = .27$, $t(75) = 2.01$, $p < .05$. LSEs who had been in the abstract condition in Part 1 continued to value their relationship significantly more than LSEs who had been in the question condition, $\beta = .41$, $t(75) = 2.69$, $p < .01$. The simple effect of SE was significant only in the question condition, $\beta = .47$, $t(75) = 3.29$, $p < .01$. Thus, similar to the results for felt security, LSEs who had been in the abstract condition in Part 1 continued to value their relationship more than did other LSEs.

Frequency of positive partner behavior. The analysis of the eight-item measure, which included four positive items and four (reverse scored) negative items, was not significant. Examining positive and negative items separately, however, we found a significant Condition \times SE interaction. Whereas in Study 2, the Condition \times SE interaction was significant on both the positive and negative items (making the entire eight-item measure significant), in Study 3 the interaction was significant only on the positive items, $\beta = -.26$, $t(75) = -2.11$, $p < .05$. Unexpectedly, on this measure, LSEs who had been in the question condition were just as high as were LSEs who had been in the abstract condition, both of whom perceived greater frequency of their partners' positive behaviors than did LSEs who had been in the control condition: abstract to control comparisons, $\beta = .59$, $t(75) = 2.06$, $p < .05$; question to control comparison, $\beta = .51$, $t(75) = 1.76$, $p < .09$. So, in addition to feeling more secure and positive about their relationships, LSEs who had been in the abstract condition also reported greater frequency of positive behaviors from their partners since completing Part 1 of the study than did LSEs who had been in the control condition.

Compliment positivity. In Study 2, there was a main effect of condition on the compliment positivity composite in Part 2, such that everyone who had been in the abstract condition reported more positive thoughts and feelings about the compliment than did participants who had been in the concrete or control conditions. In this study, no effects attained significance on this measure.

Mediation. We tested whether the Condition \times SE interaction effect on frequency of positive partner behavior was mediated by felt security as in Study 2. We also tested whether the interaction on relationship valuing (which was not found in Part 2 of Study 2) was mediated by felt security. The results indicate that LSEs' increase in felt security in the abstract condition indeed mediated their increase in perceived frequency of positive partner behaviors ($z = -2.58$, $p < .01$) as well as their increase in relationship valuing ($z = -2.77$, $p < .01$).

Coding. There were no significant effects on abstraction or verb tenses for the Part 2 narratives.

Discussion

In the control condition, LSEs were less enthusiastic about specific instances of positive feedback from their romantic partners than were HSEs, as usual. They also tended to report lower state SE, less relationship security, and less relationship valuing. When LSEs were led to question whether the feedback might be a

meaningful and significant indication that their partner admired them in general, their responses on these measures did not differ from those of LSEs in the control condition. LSEs benefited from recounting a compliment only in the abstract condition, where they were instructed to describe the meaning and significance of the compliment. Thus, the findings of Study 3 replicated and extended Study 2 in an important way, by showing that the cognitive reframing of the positive feedback must be subtly implied in order to avoid activating LSEs' self-evaluative concerns.

One unexpected finding was that HSEs reported valuing their relationships more highly in the question condition than in the control condition during the initial session. This effect may have been a compensatory reaction for HSEs, who tend to respond to potential relationship threats by affirming the relationship (Murray et al., 1998, 2002). We do not believe that questioning the meaning and significance of the compliment was a considerable threat to HSEs. However, when the questioning raised some doubts, HSEs probably compensated by recruiting additional positive thoughts and memories in support of their partners' admiration (Dodgson & Wood, 1998; Smith & Petty, 1995). Thus, they ended up even more enthusiastic than usual about the relationship.

General Discussion

Maintaining a secure and satisfying romantic relationship is particularly challenging for LSEs; they have more doubts about their partners' love than do HSEs (Murray et al., 2000), but they are less likely to benefit from their partners' expressions of positive regard (Collins et al., 2006; Murray et al., 1998). The present findings suggest a reason for optimism, however. In three studies, we showed that LSEs could be induced to take their partners' kind words to heart.

When LSEs described a past compliment from their partner in an abstract manner—what it meant to them and how it was significant for their relationship—they reported increased positive feelings and thoughts related to the specific compliment. These positive feelings, in turn, increased LSEs' state SE, security in their partners' acceptance, and consequently, evaluations of their relationships. These increases for LSEs were observed relative to no specific instructions for describing the compliment (Studies 2 and 3), concrete instructions (describing the specific details about the time the compliment was given; Studies 1 and 2), and the abstract instructions posed as a question (considering whether the compliment was meaningful and significant; Study 3). LSEs also showed increased use of present tense verbs and decreased use of past tense verbs when describing the meaning and significance of the compliment. This finding suggests that LSEs came to view the compliments as evidence of their partners' continuing admiration.

Importantly, LSEs' cognitive reframing of the compliment had lasting effects. Two to three weeks after the manipulation, LSEs who had been in the abstract condition wrote narratives about what they remembered of the compliment that used more present tense and fewer past tense verbs (Study 1). They also continued to feel more secure and positive about their relationship in general and even perceived their partner as behaving more positively toward them since the first part of the study (Studies 2 and 3). Being instructed to write about the event in a particular way may have altered how participants represented it in memory or reconstructed it at the time of recall (McGregor & Holmes, 1999; Pennebaker &

Francis, 1996). Furthermore, the abstract manipulation may have given LSEs a new way of thinking about other instances of positive feedback from their partners, and they kept these more abstract framings in mind as they considered the quality of their relationship in general. Further research into these processes is warranted.

It is important to note that in the control condition, LSEs were less positive about the compliments than were HSEs. Indeed, LSEs seem to adopt a rather myopic view when it comes to appraising positive relationship events. They focus on that one particular incident and fail to consider its implications for the relationship more broadly (cf. L. Campbell et al., 2005). This finding supports our contention that LSEs are relatively unwilling to take the risk of embracing positive feedback from their partners lest it turn out that, as suspected, they were not really valued so much after all. One alternative explanation is that LSEs feel uncomfortable accepting compliments because they do not believe they are accurate, and prefer to receive information that verifies their negative self-views (Swann et al., 2003). However, several studies have shown that although LSEs are more likely to believe negative feedback (Swann et al., 2003), they would much rather receive positive feedback (Murray et al., 2000; Swann, De La Ronde, & Hixon, 1994, for dating but not married couples). Furthermore, the present research showed quite clearly that under the right circumstances, LSEs can truly savor positive feedback.

Another alternative explanation for LSEs' natural inclination to be relatively unenthusiastic about their partners' compliments is that LSEs are unable to recall compliments that are as positive as HSEs. To address this issue, we had two coders that were blind to participants' SE levels rate how positive the compliments were (focusing on the nature of the compliments and not how positively they were described, which would be affected by the manipulation). Across the three studies, the correlation between positivity and SE was $r(266) = .004, ns$. Thus, it does not appear that LSEs recall less positive feedback from their partners than do HSEs. Rather, LSEs are more hesitant to take positive feedback to heart.

Our studies, however, demonstrate that LSEs can be encouraged to see their value to their partners, even 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 et al., 2000, 2001), at least until their unwarranted insecurities become problematic for their partners. In all studies, HSEs were relatively unaffected by the manipulation of the abstractness of the compliment. We suspect that their confidence in their partners' love allows them to spontaneously make the most of positive feedback.

One question that remains to be addressed is whether these results would replicate with a married sample (at most, 4% of the sample was married in these studies). Given that dependence regulation processes have been demonstrated to operate similarly in both dating and married couples (Murray et al., 2006), we are fairly confident that we would observe a similar pattern of results with a sample composed entirely of married participants. However, the effects might be weaker. People attend to and weight more heavily the signs of their partners' caring and commitment in early stages of relationships (Fletcher, Fincham, Cramer, & Heron, 1987), so individuals in long-term relationships (whether married or not) may be less affected by thoughts of a simple compliment. As well, married couples may be more motivated to have negative

self-views verified by their partners (Swann et al., 1994) and therefore might be resistant to the manipulation.

Possible Mechanisms of the Effect

More pressing questions involve the precise mechanism underlying the experimental effect. Giving positive feedback to LSEs is a risky business. Several experiments have shown that it can backfire and actually make them feel worse (Logel et al., 2006; Peach & MacDonald, 2004; Wood, Heimpel, Newby-Clark, & Ross, 2005). Why, then, did we succeed in making things better for LSEs? Although we do not have enough evidence at this time to make definitive statements, we have some promising ideas for why past attempts have failed, whereas our manipulation was successful.

First, in our studies the positive feedback was self-generated; participants came up with an example of feedback they had received and then those who were assigned to the abstract condition were encouraged to make more meaning of it. They were not directly told by the researcher that they had scored high on some positive attribute or that their partner thought very highly of them, relative to other people. LSEs are less certain than HSEs that upon comparing themselves to others they will emerge as superior (Baumeister et al., 1989; Taylor & Brown, 1988), so in some situations LSEs self-protectively shy away from social comparison information (see Baumeister et al., 1989, and Wood & Lockwood, 1999, for reviews). But even being presented with a comparison that is clearly in their favor may be threatening for LSEs if it prompts them to evaluate how they measure up to others more generally, and especially to their partner, to whom they typically feel inferior (Murray et al., 2005).

Second, we did not tell participants that they possessed a specific positive attribute or resembled an ideal self, for example, that they were a considerate partner. That kind of positive feedback would be relatively discrepant with LSEs' self-conceptions, so they would automatically try to judge its fit (Wood et al., 2006). This process could yield thoughts and memories both in support of and against a favorable conclusion (cf. Showers, 1992). After being told they are a considerate partner, LSEs may think of times they acted inconsiderately. Thus, LSEs would imagine themselves disappointing their partners when they fell short of this ideal (Logel et al., 2006; Murray et al., 1998). Another way to think of this issue is that traditional positive feedback manipulations work in a top-down manner by first giving participants a broad conclusion about a desirable attribute. For LSEs, this would activate a search for evidence relevant to this conclusion, and they may be just as likely to find inconsistent as consistent evidence. In contrast, we took a bottom-up approach and asked participants to first recall a specific compliment and then encouraged them to make a broader conclusion about the compliment's implications. Generalizing from their own evidence may have prevented LSEs from activating a search for disconfirming examples. Further research is needed, however, to determine whether the bottom-up (vs. top-down) characterization of our manipulation is as crucial as we suspect.

A third reason why our abstract manipulation worked so well may be that it presented a safe enhancement opportunity for LSEs. LSEs are more interested in protecting the self against loss than are HSEs (Baumeister et al., 1989), taking only those opportunities for

self-enhancement that seem sure to affirm the self (Rudich & Vallacher, 1999; Wood, Giordano-Beech, Taylor, Michela, & Gaus, 1994). In our abstraction manipulation, we presented the broad meaning and significance of the positive feedback as a foregone conclusion. The assumption inherent in our instructions was that the compliment was unquestionably an important expression of positive regard. In Study 3, when we posed meaning and significance as a question, there was no benefit to LSEs. Thus, only when there were no doubts about its importance did LSEs feel safe to embrace their partners' positive feedback.

Furthermore, instead of attempting to give participants a global sense of acceptance, our manipulation made one particular quality that participants had demonstrated in the past appear to have more global implications. The suggestion that participants' partners highly valued something specific about them, not that they highly valued the participant overall, should be a safer and more acceptable conclusion for LSEs. Fortunately, they were able to take this to the next level and make their own conclusions about how much their partners valued them more generally, as demonstrated by increased state SE (all studies) and increased felt security (Studies 2 and 3). In fact, the conclusions LSEs drew were impressively broad—some of the items in the felt security measure included "My partner loves and accepts me unconditionally" and "I am confident my partner will always want to stay in our relationship."

Practical Implications

Clinical researchers have long noted that interventions in marital therapy must go beyond increasing rates of partners' positive behaviors. Individuals should also be trained to attend to these behaviors and make relationship-enhancing attributions for them. Otherwise, LSEs and other individuals dissatisfied with their relationships may frame their partners' positive behavior in a way that undermines its potentially reinforcing impact (Holtzworth-Munroe & Jacobson, 1985; Robinson & Price, 1980). On the basis of the present studies, we similarly suggest that it would not be sufficient to encourage partners of LSEs to increase their frequency of giving compliments because LSEs tend not to take compliments to heart. Furthermore, interventions that require LSEs' partners to make more effort to reassure LSEs might be frustrating and tiring for the partners (Van Orden & Joiner, 2006). Rather, LSEs should be encouraged to abstractly frame and generalize from their partners' compliments. After practice in the use of this reframing technique on memories of past compliments, we suspect that LSEs could learn to embrace their partners' current compliments as well.

Concluding Comments

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 and take the risk of thinking and behaving in ways that promote the value of the partner and the relationship. The current studies are the first to show that experimentally increasing felt security (through abstract compliment framing) causes LSEs to value their relationships more highly. Further, these findings help clarify that it is concerns about acceptance, and not a fixed aspect of LSEs' personalities,

that causes LSEs to be critical toward their partners. Recent research in attachment theory has similarly shown that priming attachment security increases compassion and altruistic behavior, regardless of dispositional attachment style (Mikulincer, Shaver, Gillath, & Nitzberg, 2005).

In future research we plan to examine whether the abstract compliment manipulation will function as a buffer against relationship threats for LSEs. Typically, LSEs self-protectively decrease closeness and devalue their relationships when they feel rejected (Murray et al., 1998, 2002), actions that ultimately undermine their relationships (Murray, Griffen, et al., 2003). We believe that the boost to felt security engendered by an abstract compliment description will prevent LSEs from behaving in this relationship-destructive manner.

References

- Aiken, L. S., & West, S. G. (1996). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Baldwin, M. W., & Sinclair, L. (1996). Self-esteem and "if . . . then" contingencies of interpersonal acceptance. *Journal of Personality and Social Psychology, 71*, 1130–1141.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226–244.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest, 4*, 1–44.
- Baumeister, R. F., Tice, D. M., & Hutton, D. G. (1989). Self-presentational motivations and personality differences in self-esteem. *Journal of Personality, 57*, 547–579.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment Theory and Close Relationships* (pp. 46–76). New York: Guilford Press.
- Brennan, K. A., & Morris, K. A. (1997). Attachment styles, self-esteem, and patterns of seeking feedback from romantic partners. *Personality and Social Psychology Bulletin, 23*, 23–31.
- Brown, J. D., & Dutton, K. A. (1995). The thrill of victory, the complexity of defeat: Self-esteem and people's emotional reactions to success and failure. *Journal of Personality and Social Psychology, 68*, 712–722.
- Cameron, J. J., Anthony, D. B., Gaetz, R., & Balchen, S. (2006). *The impact of self-esteem on liking inference and cue detection*. Manuscript in preparation.
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology, 70*, 141–156.
- Campbell, L., Simpson, J. A., Boldry, J., & Kashy, D. A. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology, 88*, 510–531.
- Camper, P. M., Jacobson, N. S., Holtzworth-Munroe, A., & Schmaling, K. B. (1988). Causal attributions for interactional behaviors in married couples. *Cognitive Therapy and Research, 12*, 195–209.
- Collins, N. L., & Feeney, B. C. (2004). Working models of attachment shape perceptions of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology, 87*, 363–383.
- Collins, N. L., Ford, M. B., Guichard, A. C., & Allard, L. M. (2006). Working models of attachment and attribution processes in intimate relationships. *Personality and Social Psychology Bulletin, 32*, 201–219.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*, 644–663.
- Dodgson, P. G., & Wood, J. V. (1998). Self-esteem and the cognitive accessibility of strengths and weaknesses after failure. *Journal of Personality and Social Psychology, 75*, 178–197.
- Fincham, F. D., & Bradbury, T. N. (1993). Marital satisfaction, depression, and attributions: A longitudinal analysis. *Journal of Personality and Social Psychology, 64*, 442–452.
- Fletcher, G. J. O., Fincham, F. D., Cramer, L., & Heron, N. (1987). The role of attributions in the development of dating relationships. *Journal of Personality and Social Psychology, 53*, 481–489.
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology, 60*, 895–910.
- Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review, 106*, 766–794.
- Holtzworth-Munroe, A., & Jacobson, N. S. (1985). Causal attributions of married couples: When do they search for causes? What do they conclude when they do? *Journal of Personality and Social Psychology, 48*, 1398–1412.
- Kernis, M. H., Brockner, J., & Frankel, B. S. (1989). Self-esteem and reactions to failure: The mediating role of overgeneralization. *Journal of Personality and Social Psychology, 57*, 707–714.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology, 68*, 518–530.
- Logel, C., Spencer, S. J., Wood, J. V., Holmes, J. G., & Zanna, M. P. (2006). *Guarded and responsive low self-esteem: How implicit self-esteem functions among low explicit self-esteem individuals*. Manuscript submitted for publication.
- Lomore, C. D., Spencer, S. J., & Holmes, J. G. (in press). Shared values affirmation as a strategy to enhance low self-esteem women's relationship perceptions. *Self and Identity*.
- McFarland, C., & Ross, M. (1982). Impact of causal attributions on affective reactions to success and failure. *Journal of Personality and Social Psychology, 43*, 937–946.
- McGregor, I., & Holmes, J. G. (1999). How storytelling shapes memory and impressions of relationship events over time. *Journal of Personality and Social Psychology, 76*, 403–419.
- Mikulincer, M., Shaver, P. R., Gillath, O., & Nitzberg, R. A. (2005). Attachment, caregiving, and altruism: Boosting attachment security increases compassion and helping. *Journal of Personality and Social Psychology, 89*, 817–839.
- Murray, S. L., Bellavia, G. M., Rose, P., & Griffin, D. W. (2003). Once hurt, twice hurtful: How perceived regard regulates daily marital interactions. *Journal of Personality and Social Psychology, 84*, 126–147.
- Murray, S. L., Griffin, D. W., Rose, P., & Bellavia, G. (2003). Calibrating the sociometer: The relational contingencies of self-esteem. *Journal of Personality and Social Psychology, 85*, 63–84.
- Murray, S. L., Holmes, J. G., & Collins, N. L. (2006). Optimizing assurance: The risk regulation system in relationships. *Psychological Bulletin, 132*, 641–666.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology, 70*, 79–98.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (2000). Self-esteem and the quest for felt security: How perceived regard regulates attachment processes. *Journal of Personality and Social Psychology, 78*, 478–498.

- Murray, S. L., Holmes, J. G., Griffin, D. W., Bellavia, G., & Rose, P. (2001). The mismeasure of love: How self-doubt contaminates relationship beliefs. *Personality and Social Psychology Bulletin*, *27*, 423–436.
- Murray, S. L., Holmes, J. G., MacDonald, G., & Ellsworth, P. C. (1998). Through the looking glass darkly? When self-doubts turn into relationship insecurities. *Journal of Personality and Social Psychology*, *75*, 1459–1480.
- Murray, S. L., Rose, P., Bellavia, G., Holmes, J. G., & Kusche, A. G. (2002). When rejection stings: How self-esteem constrains relationship-enhancement processes. *Journal of Personality and Social Psychology*, *83*, 556–573.
- Murray, S. L., Rose, P., Holmes, J. G., Derrick, J., Podchaski, E. J., Bellavia, G., & Griffin, D. (2005). Putting the partner within reach: A dyadic perspective on felt security in close relationships. *Journal of Personality and Social Psychology*, *88*, 327–347.
- Peach, J., & MacDonald, T. K. (2004). *When good news is bad: Adult romantic attachment styles and responses to positive feedback about one's relationship*. Unpublished senior honors thesis, Queen's University, Kingston, Ontario, Canada.
- Pennebaker, J. W., & Francis, M. E. (1996). Cognitive, emotional, and language processes in disclosure. *Cognition and Emotion*, *10*, 601–626.
- Pennebaker, J. W., Francis, M. E., & Booth, R. J. (2001). *Linguistic inquiry and word count: LIWC 2001*. Mahwah, NJ: Erlbaum.
- Robinson, E. A., & Price, M. G. (1980). Pleasurable behavior in marital interaction: An observational study. *Journal of Consulting and Clinical Psychology*, *48*, 117–118.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rudich, E. A., & Vallacher, R. R. (1999). To belong or to self-enhance? Motivational bases for choosing interaction partners. *Personality and Social Psychology Bulletin*, *25*, 1387–1404.
- Semin, G. R., & De Poot, C. J. (1997). The question-answer paradigm: You might regret not noticing how a question is worded. *Journal of Personality and Social Psychology*, *73*, 472–480.
- Semin, G. R., & Fiedler, K. (1988). The cognitive functions of linguistic categories in describing persons: Social cognition and language. *Journal of Personality and Social Psychology*, *54*, 558–568.
- Showers, C. J. (1992). Compartmentalization of positive and negative self-knowledge: Keeping bad apples out of the bunch. *Journal of Personality and Social Psychology*, *62*, 1036–1049.
- Smith, S. M., & Petty, R. E. (1995). Personality moderators of mood congruency effects on cognition: The role of self-esteem and negative mood regulation. *Journal of Personality and Social Psychology*, *68*, 1092–1107.
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). San Francisco: Jossey-Bass.
- Swann, W. B., Jr., Rentfrow, P. J., & Guinn, J. S. (2003). Self-verification: The search for coherence. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 367–383). New York: Guilford Press.
- Swann, W. B., Jr., De La Ronde, C., & Hixon, G. J. (1994). Authenticity and positivity strivings in marriage and courtship. *Journal of Personality and Social Psychology*, *66*(5), 857–869.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, *103*, 193–210.
- Van Orden, K. A., & Joiner, T. E., Jr. (2006). The inner and outer turmoil of excessive reassurance seeking: From self-doubts to social rejection. In K. D. Vohs & E. J. Finkel (Eds.), *Self and relationships: Connecting interpersonal and intrapersonal processes* (pp. 104–129). New York: Guilford Press.
- Wood, J. V., Anthony, D. B., & Foddis, W. F. (2006). Should people with low self-esteem strive for high self-esteem? In M. H. Kernis (Ed.), *Self-esteem issues and answers: A source book of current perspectives* (pp. 288–296). New York: Psychology Press.
- Wood, J. V., Giordano-Beech, M., Taylor, K., Michela, J. L., & Gaus, V. (1994). Strategies of social comparison among people with low self-esteem: Self-protection and self-enhancement. *Journal of Personality and Social Psychology*, *67*, 713–731.
- Wood, J. V., Heimpel, S. A., Newby-Clark, I. R., & Ross, M. (2005). Snatching defeat from the jaws of victory: Self-esteem differences in the experience and anticipation of success. *Journal of Personality and Social Psychology*, *89*, 764–780.
- Wood, J. V., & Lockwood, P. (1999). Social comparisons in dysphoric and low self-esteem people. In R. M. Kowalski & M. R. Leary (Eds.), *The social psychology of emotional and behavioral problems: Interfaces of social and clinical psychology*. (pp. 97–135). Washington, DC: American Psychological Association.

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