

## The Self-Serving Bias in Relational Context

Constantine Sedikides and W. Keith Campbell  
University of North Carolina at Chapel Hill

Glenn D. Reeder  
Illinois State University

Andrew J. Elliot  
University of Rochester

This article examined the impact of relationship closeness on the self-serving bias (SSB). Members of relationally distant dyads working on interdependent-outcomes tasks manifested the SSB: They took credit for dyadic success but blamed the partner for dyadic failure. However, members of relationally close dyads did not manifest the SSB: They did not take more credit than their partner for dyadic success and did not blame the partner more than the self for dyadic failure. This gracious attributional pattern of relationally close dyad members is due, at least in part, to formation of a favorable impression of the partner. Relationship closeness acts as a bound to an individual's self-enhancing tendencies.

If more than one person is responsible for a miscalculation, none will be at fault—Murphy's Law

Individuals self-enhance. They believe that they are more trustworthy, moral, and physically attractive than others and that they are above-average teachers, managers, and leaders. One mechanism through which individuals maintain such unduly positive beliefs is the self-serving bias (SSB). The SSB refers to individuals taking responsibility for successful task outcomes but blaming circumstances or other persons for failed task outcomes. For example, students will take credit for passing a difficult examination but will attribute failing the examination to its difficulty or the instructor's tough grading policy.

Explanations for the SSB have been the subject matter of considerable debate. One early review advocated imperfect information-processing strategies such as selective attention and informational availability or accessibility in memory (Miller & Ross, 1975). This cognitive explanation emphasizes differential access to information as the leading cause of the SSB. Individuals manifest the SSB because they restrict their attention to the information available to them, not because they are motivated

to protect or enhance the self. Individuals may fail to realize that the information available to them is incomplete, but this is the result of an imperfect mind rather than the result of motivation. Another explanation for the SSB advocated motivational reasons, such as the desire to think positively or avoid thinking negatively of the self (Weary-Bradley, 1978). With an increased accumulation of empirical evidence has come the understanding that cognitive explanations alone cannot account fully for the SSB. Instead, motivational reasons, and specifically the desire to enhance the positivity or diminish the negativity of one's self-concept, have emerged as the predominant (i.e., sufficient) explanation for the SSB (Zuckerman, 1979).

### THE SSB IN DYADIC INTERDEPENDENT-OUTCOMES TASKS

The SSB has been investigated in both independent- and interdependent-outcomes tasks. In the former settings, participants work on a task independently. The SSB in these situations is robust (Campbell & Sedikides, 1998). In interdependent-outcomes settings, which are of relevance to the present work, participants collaborate on a task. Success or failure of the dyad hinges on the joint rather than unique contribution of the members. Given the dyad's common fate—interaction—effort coordination and a good working relationship between partners are crucial prerequisites for an optimal task outcome. In this article we are particularly concerned with whether and how partners' relationship affects the task outcome and, more specifically, how it affects their attributions for the task outcome. We are interested in relativistic attributions (i.e., attributing the task outcome to the self or the partner). Furthermore, we focus on two types of dyadic relationships: distant (i.e., strangers) and close (i.e., friends).

One objective of the present research was to test whether the SSB emerges in distant dyads. In the absence of a relational bond, and in light of the robustness of the SSB in independent-outcomes tasks, we would not be surprised if distant dyads

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Constantine Sedikides and W. Keith Campbell, Department of Psychology, University of North Carolina at Chapel Hill; Glenn D. Reeder, Department of Psychology, Illinois State University; Andrew J. Elliot, Department of Psychology, University of Rochester.

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Correspondence concerning this article should be addressed to Constantine Sedikides, Department of Psychology, University of North Carolina at Chapel Hill, Davie Hall, CB# 3270, Chapel Hill, North Carolina 27599-3270. Electronic mail may be sent to dionysus@unc.edu.

manifested the SSB. That is, participants whose dyad received success feedback would be likely to consider the self more responsible than the partner for the task outcome, whereas participants whose dyad received failure feedback would be likely to hold the partner more responsible than the self for the task outcome. The assumed motivation for the manifestation of the SSB is the protection or enhancement of the self.

However, the major objective of the present research was to determine whether the SSB emerges in close dyads. Is the same motivation (i.e., protection or enhancement of the self) present when the individual works on a task collaboratively with a close other?

Several theoretical perspectives offer a sound rationale for the prediction that the SSB will not be present in close relationships. We label this the *relationships-as-bound* hypothesis. Balance theory (Heider, 1958) posits that attitudes toward the self extend to close others. Self-expansion theory (Aron & Aron, 1997) states that the self-concept expands to incorporate a close partner. According to interdependence theory and the communal-exchange relationships literature, the goal in close relationships is to maximize outcomes for both individuals involved (Rusbult & Arriaga, 1997), with an accompanying genuine concern for the welfare of the partner (Clark & Mills, 1979). Additionally, in line with the extended self-evaluation maintenance model (Beach & Tesser, 1995), close others are motivated to protect both their own and their partners' self-concepts. Finally, as Sedikides and Strube's (1997) self-concept enhancing tactician model proposes, one function of close relationships is to place an individual's self-enhancing tendencies in check. All of these theoretical perspectives converge in supporting the notion that, in close dyads, one will not be more likely to protect or enhance the self than the partner. Participants whose dyad receives success feedback will share the responsibility for the task outcome with their partners, and so will participants whose dyad receives failure feedback.

On the other hand, a diverse body of literature emphasizes the self-protective or self-enhancing role that close relationships serve. We label this the *relationships-as-enabler* hypothesis. Individuals are not accurate in how they think they are viewed by specific related others (Kenny & DePaulo, 1993), probably because others do not disclose their true opinion of the individual (Felson, 1993). In fact, close persons avoid evaluating each other (Goffman, 1959), are more likely to discuss each other's positive than negative traits (Blumberg, 1972), and distort the communication of information so that it is more consistent with each other's attitudes or self-concept (Manis, Cornell, & Moore, 1974). Among close persons, "good news tends to be communicated more frequently, more quickly, more fully, and more spontaneously than bad news" (MUM effect; Tesser & Rosen, 1975, p. 228). Perhaps that is why close others are trusted (Holmes & Rempel, 1989). In fact, at times of personal crises, close others embrace the suffering individual with social support that regulates and repairs negative emotions (Cohen & Wills, 1985), increases feelings of well-being (Cohen & Hoberman, 1983), and elevates the positivity of the self (Major, Testa, & Bylsma, 1991). It is not surprising, then, that relationally involved persons report higher self-esteem than uninvolved persons (Long, 1983). Close others are a safety cushion, if not the springboard or even the cheerleader, for one's initiation of self-protection or

self-enhancement strategies. By this logic, the SSB ought to be present (perhaps magnified!) in close relationships. Close participants should take more responsibility for the dyadic success than its failure.

Is there empirical evidence in the SSB literature for the relationships-as-bound and relationships-as-enabler hypotheses? Before delving into the literature, we set out to define the characteristics of a stringent test for the motivationally based emergence of the SSB in dyadic interdependent settings. Such a test ought to satisfy the following four procedural criteria: (a) members of the dyad should be separated (i.e., placed in adjacent rooms) by the experimenter, so that they do not interact during task completion; (b) the dyad should complete a relatively unfamiliar, experimenter-provided task; (c) each member should be given fabricated success or failure feedback at the dyadic level; and (d) each member should attribute privately the task outcome to either the self or the partner.

These procedural criteria are most likely to exclude cognitive explanations for the obtained SSB, because (a) the dyad's attributions are based on work that was completed immediately before the attributions rather than in the remote past and in a different setting, thus effectively limiting or perhaps eliminating memorial biases; (b) the quality of an individual's own contribution is difficult, if not impossible, to appraise unambiguously; and (c) dyad members are unaware of each other's performance. We searched for published investigations whose experimental procedures fulfilled all of the above-mentioned four critical features. We review these investigations below.

#### The SSB in Interdependent-Outcomes Tasks: When the Dyad Consists of Distant Partners

Three experiments have tested whether the SSB is present in dyads that are involved in interdependent-outcomes tasks and are composed of distant partners. In Johnston's (1967) experiment, participants engaged in a tracking task, in which they manipulated a control knob in an effort to hold a moving cursor steady at zero. Participants believed that they were working on this task with a partner who was sitting in an adjacent room. In actuality, no partner was present. After three experimental sessions, each consisting of twenty 60-s trials, participants received either success or failure feedback. The type of feedback was determined randomly. In the case of success feedback, participants tended to give less credit to the self than to the partner. In the case of failure feedback, participants accepted more responsibility for the task outcome. These patterns demonstrate a reversal of the SSB, what we call the *other-serving bias* (OSB).

Participants in Wolosin, Sherman, and Till's (1973) research read through 20 pairs of geographic locations and chose, from each pair, the location in which they were most likely to reunite with a friend. Participants either cooperated (Experiment 1) or competed (Experiment 2). At the end of the task, participants received either success or failure feedback. Cooperative participants took individual responsibility for the dyadic task success and blamed the partner for the dyadic task failure. Clearly, the SSB was at work. Competitive participants also accepted individual responsibility for success but blamed the self and the partner to an equal degree for failure.

In summary, the evidence regarding the presence of the SSB

in dyadic interdependent-outcomes tasks is weak. In two cases (Wolosin et al., 1973, Experiment 1, Experiment 2, success condition) support for the SSB was found. In another case (Johnston, 1967), support for an OSB was reported. In still another case (Wolosin et al., 1973, failure condition of Experiment 2), no support was obtained for either the SSB or the OSB.

One explanation for the weak evidence for the SSB concerns task importance. The SSB becomes stronger as task importance and an imminent threat to the self increases (Campbell & Sedikides, 1998). In fact, Johnston's (1967) tracking task—a task that failed to yield an SSB—may not have been perceived by the participants as particularly important. In our research we controlled for this potential problem by standardizing task importance. Specifically, we used a task that measures, in a face-valid manner, creativity—an attribute that college students (our sampled population) regard as important. We believed that the introduction of an important task, coupled with the adoption of the four critical procedural features described above, would allow us to demonstrate clearly a motivationally based SSB in dyads composed of distant partners.

### The SSB in Interdependent-Outcomes Tasks: When the Dyad Consists of Close Partners

Several studies have examined the presence of the SSB in close dyads (e.g., Fincham & Bradbury, 1989; Ross & Sicoly, 1979; Thompson & Kelley, 1981). Some studies have reported evidence for the SSB, others have obtained evidence for the OSB, and still others have obtained support for neither. We do not discuss these findings in detail, however, because two features of the studies fail to satisfy our review criteria. First, the studies tested participants' memories of past interdependent activities rather than participants' evaluation of their currently completed performance. Second, the studies did not use a success–failure feedback manipulation. In summary, no investigation has tested conclusively whether close participants, who work on dyadic interdependent tasks, display a motivationally based SSB.

## EXPERIMENT 1: INDUCING RELATIONSHIP CLOSENESS

In Experiment 1 we tested the presence of the SSB in distant and close participants. We experimentally induced relationship closeness, then we asked participants to complete a creativity test in separate rooms, provided them with bogus success or failure feedback, and offered them the choice to attribute the task outcome to the self or the partner on a continuum.

We opted to induce relationship closeness (rather than use close persons, i.e., friends) to bypass a potential confound, namely the anticipation of future interactions. Friends anticipate seeing each other after the experiment. Thus, friends may refrain from the SSB to avoid an account of any selfish attributions about which the partner might inquire. In other words, friends may refrain from the SSB for the sake of relationship maintenance. In fact, in an influential literature on communal-exchange relationships, Mills and Clark (1982) suggested that anticipation of future and rewarding interactions with a partner can lead

to a less selfish (i.e., more communal) orientation in outcome distribution.

Given that participants were unacquainted, they were unlikely to expect future interactions, let alone rewarding interactions. In fact, care was taken to ensure that no participant (a) anticipated to interact with her or his partner after the experiment or (b) intended to discuss the experiment with the partner in incidental encounters outside the laboratory. As part of the procedure, we induced closeness for half of the participants. A vital feature in the development of a close relationship is reciprocal and escalating self-disclosure (Derlega, Metts, Petronio, & Margulis, 1993). We devised a task to simulate such self-disclosure between participants (for a similar procedure, see Aron, Melinat, Aron, Vallone, & Bator, 1997).

On the basis of our theorizing and literature review, we felt confident in making the prediction that distant partners would manifest the SSB as long as they perceived the task as important. However, we were not so certain about close partners. Indeed, the relationships-as-bound and relationships-as-enabler hypotheses lead to incompatible derivations. The former hypothesis does not anticipate the emergence of the SSB whereas the latter hypothesis predicts its presence.

## Method

### *Design and Participants*

The design was a balanced 2 (relationship type: close or distant)  $\times$  2 (feedback type: success or failure)  $\times$  2 (participant gender: female or male) between-subjects factorial. We included participant gender as a variable for exploratory purposes. Past research on dyads involved in interdependent-outcomes tasks has not reported gender differences in the SSB. In independent-outcomes tasks, however, men display the SSB to a greater degree than women (Campbell & Sedikides, 1998). Additionally, we wanted to explore whether the two genders manifest the SSB differentially as a function of closeness. Is one gender affected by closeness more than the other?

Participants were 80 University of Wisconsin—Madison students. (We excluded 4 additional dyads, because at least 1 dyad member in each suspected that the feedback was false.) In both Experiments 1 and 2, participants were (a) undergraduate students fulfilling an introductory psychology course option, (b) tested in same-gender dyads, and (c) tested by both female and male experimenters. Also, in both experiments we used dyads whose members were unfamiliar with each other at the start of the experiment, as verified by the experimenter.

### *Procedure and Materials*

On participants' arrival at the laboratory, an experimenter placed each dyad in a room and seated the 2 participants across from each other. Participants were informed that they would not see each other at the end of the experiment. Also, they were asked not to interact, or at least not to talk about this experiment, if they saw each other on campus. Next, participants learned that they would engage in two short and unrelated studies, the first of which would involve a communication task. This ostensible study actually was the relationship closeness induction task (RCIT), a structured self-disclosure task. The RCIT consists of three lists of questions (which become progressively more personal) and instructs participants to spend 9 min mutually self-disclosing while engaging in as natural a conversation as possible. Participants spend 1 min on List I (7 questions; e.g., "How old are you?" and "Where are you from?"), 3 min on List II (12 questions; e.g., "What are your

hobbies?" and "What would you like to do after graduating from this university?"), and 5 min on List III (10 questions; e.g., "Is it difficult or easy for you to meet people? Why?" and "Tell me one thing about yourself that most people who already know you don't know?"). Participants completed the RCIT in the absence of the experimenter.

After completing the RCIT, participants marked on separate sheets of paper the number of questions they had asked each other from each of the three lists. Participants asked an average of 6.46 questions from List I, 9.08 questions from List II, and 9.00 questions from List III. Participants also reported that they had adequate privacy, felt comfortable, and considered conversation a valid way to become familiar with a stranger, and they reported frequent engagement in conversations like the one instigated by the RCIT.<sup>1</sup> Most important, participants completed a manipulation check of relationship type consisting of four single-item 9-point scales that assessed closeness, similarity, degree of liking, and likelihood of future friendship. The scales were worded as follows: "How close do you feel to the participant with whom you are working on this study?" (1 = *not at all close*, 9 = *very close*); "How similar do you feel to the participant with whom you are working on this study?" (1 = *not at all similar*, 9 = *very similar*); "How much do you like the participant with whom you are working on this study?" (1 = *not at all*, 9 = *very much*); and "In the future, to what extent do you feel you could be friends with the participant with whom you are working on this study?" (1 = *not at all*, 9 = *very much*).<sup>2</sup>

Participants were subsequently informed that it was time for Study 2, which involved "a test of creativity." Participants in the close condition remained with the same partner; participants in the distant condition were switched to a new partner, who had just completed the RCIT with another participant. We followed this practice to ensure that participants in both the close and distant conditions went through an identical relationship induction procedure.

The test of creativity was presented to participants as the "Lange-Elliott Creativity Test." Participants were told that this second study concerned the "effects of brainstorming on the creativity of dyads." *Brainstorming* was defined as "coming up with as many uses for an object as you can." Participants were further informed that they would receive normative performance feedback.

Participants learned that the test would consist of two segments. In each segment the participant and her or his partner would be allotted 5 min to generate as many uses as possible for an object ("brick" and "candle" served as the objects for the two segments). The experimenter would place the uses each participant generated in a box along with those the partner generated. Participants were told that the total number of nonoverlapping uses each dyad generated would be summed to form a combined creativity score. At this point, participants completed the creativity importance manipulation check: They rated how important the trait of creativity was to them (1 = *not at all important*, 10 = *very important*).

Next, participants completed the creativity test, and each received performance feedback that was determined randomly and referred to the partners' combined performance. Success condition participants were informed that they had scored at the 93rd percentile and were given an explanation ("You scored better than 93% of the individuals used in our normative reference sample") and an interpretation ("You did well") of their performance. Failure condition participants were informed that they had scored at the 31st percentile and were also given an explanation ("You scored worse than 69% of the individuals used in our normative reference sample") and interpretation ("You did poorly") of their performance.<sup>3</sup>

Subsequently, participants were instructed that, because the "Lange-Elliott Creativity Test" was based on pooled scores, the experimenter was unable to determine which participant was more responsible for the overall result obtained by the dyad. To assist the experimenter with this task, and under the guarantee of confidentiality and anonymity, each

participant answered the two critical questions that assessed the SSB: "Who was most responsible for the outcome of this test?" (1 = *the other participant*, 10 = *myself*) and "Who made the greatest positive contribution to this test?" (1 = *the other participant*, 10 = *myself*).<sup>4</sup>

Next, participants completed the success and failure manipulation checks. They responded to two questions: "How well do you think that both you and the other participant did on this test?" (1 = *not at all well*, 9 = *very well*) and "How important was the outcome of this test to you?" (1 = *not at all important*, 10 = *very important*). At the end, participants gave their open-ended responses to the question "What do you think the true purpose of this experiment was?" and were debriefed individually and thoroughly.

## Results and Discussion

### Manipulation Checks

#### Relationship Type

We averaged the means on the four relationship type scales ( $\alpha = .78$ ) to form a composite index. Participants in the close condition reported a higher level of relationship closeness ( $M = 5.39$ ) than participants in the distant condition ( $M = 4.05$ ),  $F(1, 78) = 26.39, p < .0001$ . The RCIT was effective in inducing closeness.

#### Creativity Importance

A  $t$  test testing the significance of the overall mean ( $M = 7.90$ ) against the scale midpoint (5.50) revealed that creativity was an important trait to participants,  $t(79) = 13.36, p < .0001$ .

#### Success and Failure Feedback

The feedback type manipulation was effective. Participants who succeeded reported that both they and their partner performed better ( $M = 8.60$ ) compared to reports of participants who failed ( $M = 4.00$ ),  $F(1, 72) = 172, p < .001$ , and they considered the creativity test as more important ( $M = 5.13$ ) than did participants who failed ( $M = 3.95$ ),  $F(1, 72) = 4.34, p < .04$ .

### Dependent Measures

#### Responsibility

Of central interest was the Feedback Type  $\times$  Relationship Type interaction. In the case of distant relationships, we predicted the emergence of the SSB. However, in the case of close

<sup>1</sup> We obtained identical results in Experiment 2.

<sup>2</sup> We also assessed participants' mood ("How do you feel right now?"; 1 = *very sad*, 9 = *very happy*). There was no mood difference between distant and close participants.

<sup>3</sup> We arrived at these feedback percentile scores through pilot testing.

<sup>4</sup> Dyadic data present an intradyad dependency: Responses within dyads may be more similar to each other than responses within other dyads. To examine this possibility, we treated dyad as the independent variable, using the one-way analysis of variance method (Myers, Di-Cecco, & Lorch, 1981), and calculated an intraclass correlation. In neither of the reported experiments was dyadic membership related significantly to the dependent measures.

relationships our theory-based derivations were divergent: The relationships-as-bound hypothesis did not anticipate the emergence of the SSB, whereas the relationships-as-enabler hypothesis predicted the presence of the SSB.

The interaction was significant,  $F(1, 72) = 5.41, p < .02$ . Our prediction pertaining to distant relationships was confirmed: Distant participants assumed greater personal responsibility for the dyad's success ( $M = 6.20$ ) than for its failure ( $M = 5.23$ ),  $t(38) = 2.20, p < .03$ , thus manifesting the SSB. It is important to note, however, that close participants took neither greater responsibility for the dyad's success ( $M = 5.30$ ) nor lower responsibility for the dyad's failure ( $M = 5.60$ ),  $t(38) = 0.88, p < .39$ . Close participants did not manifest the SSB, thus lending support to the relationships-as-bound hypothesis.

The Feedback Type  $\times$  Participant Gender interaction was significant,  $F(1, 72) = 4.21, p < .04$ . Men assumed greater responsibility for the dyad's success ( $M = 5.85$ ) than for its failure ( $M = 4.95$ ),  $t(38) = 2.03, p < .05$ , whereas women's attributions for the dyadic success ( $M = 5.65$ ) and for its failure ( $M = 5.88$ ) did not differ significantly,  $t(38) = -0.66, p < .52$ . The Feedback Type  $\times$  Participant Gender  $\times$  Relationship Type interaction was not significant,  $F(1, 72) = 0.60, p < .44$ . Closeness did not affect the manifestation of the SSB differentially in women and men.

### *Positive-Contribution Attributions*

In this analysis, the critical question was whether participants in close (vs. distant) dyads would claim to have made a greater positive contribution to the outcome, relative to the partner. The feedback type main effect and the Feedback Type  $\times$  Relationship Type interaction are not diagnostic of the SSB, given that the question probes for greater positive contribution to the test. Feedback type is in no position to detect the SSB, because participants can claim having made a more positive contribution to both the success and the failure of the dyad. In contrast, the relationship type main effect is of major interest.

The relationship type main effect was significant. Close participants reported making a less positive contribution to the test outcome ( $M = 5.27$ ) relative to distant participants ( $M = 5.90$ ),  $F(1, 71) = 6.64, p < .01$ . (One participant did not answer the relevant question.) This finding parallels the results of the Feedback Type  $\times$  Relationship Type interaction pertaining to the responsibility question. The finding is consistent with the relationships-as-bound hypothesis.

Men claimed a greater positive contribution to the test outcome ( $M = 5.85$ ) than did women ( $M = 5.32$ ), participant gender main effect,  $F(1, 71) = 4.70, p < .03$ . The Participant Gender  $\times$  Relationship Type interaction was not significant,  $F(1, 71) = 0.11, p < .75$ .

### *Summary*

In Experiment 1 we examined the manifestation of the SSB in dyads working on an interdependent-outcomes task. We tested whether members of distant and close dyads display the SSB. The SSB emerged in distant dyads but not in close dyads. That is, distant participants took greater personal responsibility for the dyadic success than for its failure, whereas close participants

did not differ in terms of the personal responsibility they took for dyadic success and failure. In a conceptual replication of this pattern, close participants claimed a less positive contribution to the task outcome than did distant participants. The findings of Experiment 1 support the relationships-as-bound hypothesis rather than the relationships-as-enabler hypothesis.

## EXPERIMENT 2: ROLE OF PARTNER IMPRESSIONS

Experiment 1 was the first compelling empirical demonstration of a motivationally based SSB in distant partners working jointly on an interdependent-outcomes task. More interesting is that Experiment 1 also demonstrated that the SSB does not emerge among close partners working jointly on such a task. Close partners appeared to hold self-oriented biases (i.e., self-enhancement) in check. These novel findings invite replication, which was one objective of Experiment 2.

A more important objective of Experiment 2, however, was the search for mechanisms underlying the elimination of the SSB in close relationships. The mechanism that this experiment tested was differential impression favorability for close and distant partners. Do close partners refrain from the SSB because they form more positive impressions of each other?

Person perception research has attested to the power of impressions to affect ensuing psychological processes. A perceiver's impression of another person determines to a substantial extent the way in which the perceiver will think, feel, and behave toward this person (Berscheid & Walster, 1978). Do individuals' impressions of close versus distant others differ? Indeed, individuals evaluate close others more favorably than they evaluate strangers. For example, compared to strangers, individuals consider friends more sincere, dependable, and considerate and less spiteful, rude, and superficial (Brown, 1986, Experiments 2-3).

Differential favorability (i.e., more positive impressions) of close versus distant partners may explain the findings of Experiment 1. Members of close dyads may form a more positive impression of each other, compared to members of distant dyads. As a consequence, the former will not manifest the SSB, whereas the latter will. In Experiment 2 we tested partner impressions as a mediator of the SSB.

### *Method*

#### *Design and Participants*

The design was a 2 (relationship type: close or distant)  $\times$  2 (feedback type: success or failure)  $\times$  2 (participant gender: female or male) between-subjects factorial. Cell sizes ranged from 12 to 16. Participants were 104 students at the University of North Carolina at Chapel Hill. No participant expressed suspicion about the nature of the feedback.<sup>5</sup>

#### *Procedure and Materials*

The procedure of Experiment 2, like the procedure of Experiment 1, had two parts. The first part was identical to that used in Experiment 1

<sup>5</sup> Close participants reported being in a happier mood ( $M = 6.60$ ) than distant participants ( $M = 5.88$ ),  $F(1, 102) = 6.69, p < .01$ . However, we observed no changes in the reported results when we used mood as a covariate in analyses of covariance (ANCOVAs).

and included the administration of the RCIT. Participants asked each other an average of 6.43 questions from List I, 8.91 questions from List II, and 9.17 questions from List III. The second part (i.e., creativity test) of Experiment 2 differed from Experiment 1 in one important way: Participants completed a modified version of the Interpersonal Judgment Scale (IJS; Byrne, 1971) immediately before receiving test feedback. The modified IJS was designed to assess participants' impression of their partners. Participants read:

While we calculate your combined score on the *Lange-Elliot Creativity Test*, please answer the following questions to the best of your ability. We are interested in your impression of the participant with whom you are working on this study. We know you may have had only a small opportunity to form an impression of this participant. Please answer these questions using the little information you have. Your responses will be kept confidential—they will not be shown to the other participant.

Participants responded to the following seven items of the modified IJS: "The other participant: (a) is very intelligent; (b) is very moral; (c) has a good knowledge of current events; (d) is very creative; (e) is very well adjusted; (f) is very fair; and (g) is exactly the kind of person with whom I would like to work in an experiment." Participants responded to these items on scales that ranged from 1 (*not at all true*) to 8 (*very true*). Next, participants completed the dependent measures.

## Results and Discussion

### Manipulation Checks

#### Relationship Type

We averaged the means on the four relationship type scales ( $\alpha = .89$ ) to form a composite index. Once again, the RCIT was effective: Participants in the close condition reported a higher level of relationship closeness ( $M = 5.67$ ) than participants in the distant condition ( $M = 3.77$ ),  $F(1, 102) = 48.82$ ,  $p < .0001$ .

#### Creativity Importance

The  $t$  test that tested the significance of the overall mean ( $M = 7.84$ ) against the scale midpoint (5.50) was significant,  $t(102) = 13.16$ ,  $p < .0001$ . Creativity was important to participants.<sup>6</sup>

#### Success and Failure Feedback

Participants who succeeded rated the test as more important ( $M = 4.97$ ) than did participants who failed ( $M = 3.69$ ),  $F(1, 96) = 6.77$ ,  $p < .01$ . (We used only this question in Experiment 2.) Our success and failure feedback manipulation was effective.

### Dependent Measures

#### Responsibility

The crucial Feedback Type  $\times$  Relationship Type interaction was significant,  $F(1, 96) = 4.42$ ,  $p < .04$ . Distant participants took greater personal responsibility for the success of the dyad ( $M = 5.88$ ) than for its failure ( $M = 4.77$ ),  $t(54) = 2.36$ ,  $p < .02$ . However, close participants did not take greater responsibility for dyadic success ( $M = 5.75$ ) or lower responsibility for

dyadic failure ( $M = 5.92$ ),  $t(46) = -0.39$ ,  $p < .70$ . These patterns replicate the corresponding findings of Experiment 1.

The Feedback Type  $\times$  Participant Gender interaction was significant,  $F(1, 96) = 4.76$ ,  $p < .03$ . The pattern was identical to that in Experiment 1: Men assumed greater responsibility for dyadic success ( $M = 6.25$ ) than for its failure ( $M = 5.12$ ),  $t(48) = 2.39$ ,  $p < .02$ , whereas women did not differ in their responsibility attributions for dyadic success ( $M = 5.38$ ) and failure ( $M = 5.56$ ),  $t(52) = 0.46$ ,  $p < .64$ . The triple interaction was not significant,  $F(1, 96) = 1.83$ ,  $p < .18$ .

#### Positive-Contribution Attributions

As in Experiment 1, the relationship type main effect was significant. Close participants reported making a less positive contribution to the test ( $M = 5.31$ ) relative to distant participants ( $M = 6.03$ ),  $F(1, 96) = 5.87$ ,  $p < .02$ .

Men claimed a greater positive contribution to the test outcome ( $M = 6.07$ ) than did women ( $M = 5.28$ ), participant gender main effect,  $F(1, 96) = 7.15$ ,  $p < .009$ . The Participant Gender  $\times$  Relationship Type interaction was not significant,  $F(1, 96) = 0.001$ ,  $p < .99$ .

#### Modified IJS

Responses to the seven modified IJS items were highly interrelated ( $\alpha = .91$ ). We averaged these responses to create an index, termed *partner impression*. (One participant did not complete the modified IJS.) We then tested the prediction that participants in the close condition formed a more favorable impression of their partner than did participants in the distant condition, by conducting an analysis of variance (ANOVA) with relationship type and participant gender as independent variables and partner impression as the dependent variable. As predicted, participants in the close condition reported a more favorable impression of their partner ( $M = 5.13$ ) than did participants in the distant condition ( $M = 4.04$ ),  $F(1, 99) = 53.16$ ,  $p < .0001$ .

#### Mediational Analyses

Do the positive impressions that close dyad members form of each other account for the elimination of the SSB? Statistically speaking, does partner impression mediate the association between relationship type and the SSB?<sup>7</sup>

*Responsibility attributions.* The mediation concerning responsibility attributions should be interactional (Baron & Kenny, 1986). That is, the Relationship Type  $\times$  Feedback Type interaction should predict the partner impressions, and the Partner Impressions  $\times$  Feedback Type interaction, in turn, should predict the responsibility attributions. We carried out the mediational analyses in several steps.

We have already established that relationship type predicts

<sup>6</sup> Creativity was unexpectedly more important to close participants ( $M = 8.25$ ) than to distant participants ( $M = 7.49$ ),  $F(1, 102) = 4.73$ ,  $p < .03$ . However, the reported results were not altered in ANCOVAs that used creativity ratings as a covariate.

<sup>7</sup> To simplify the presentation of the mediational analyses, we excluded gender from the model. Analyses that included gender produced results identical to the ones presented in the text.

responsibility attributions (Relationship Type  $\times$  Feedback Type interaction,  $F(1, 100) = 3.78, p < .05$ ). Furthermore, we have established that relationship type predicts partner impression (relationship type main effect,  $F(1, 101) = 54.81, p < .0001$ ).

The next step involved testing whether partner impression predicts responsibility attributions. More formally, does the Partner Impression  $\times$  Feedback Type interaction predict responsibility attributions? We conducted a median split on partner impression ( $Mdn = 4.19$ ), and performed an ANOVA with partner impression and feedback type as independent variables and responsibility attributions as the dependent variable. The interaction was significant,  $F(1, 99) = 3.03, p < .05$ . When partners formed a positive impression of each other, they did not manifest the SSB (Success  $M = 5.72$ ; Failure  $M = 5.80$ ;  $t[52] = -0.19, p < .85$ ). However, when partners formed a negative impression of each other, they did manifest the SSB (Success  $M = 6.00$ ; Failure  $M = 4.88$ ;  $t[47] = -2.35, p < .02$ ).<sup>8</sup>

Last, we examined the complete model with (a) relationship type and feedback type as independent variables, (b) responsibility attributions as the dependent variable, and (c) partner impression as well as the Partner Impression  $\times$  Feedback Type interaction as covariates. If an interactional mediation exists, two conditions will need to be met. First, the Relationship Type  $\times$  Feedback Type interaction should become nonsignificant. Second, the Partner Impression  $\times$  Feedback Type interaction should remain significant. Both conditions were met: The Relationship Type  $\times$  Feedback Type interaction became nonsignificant,  $F(1, 97) = 0.08, p < .78$ , and the Partner Impression  $\times$  Feedback Type interaction remained significant,  $F(1, 99) = 5.72, p < .02$ .

In conclusion, partner impression mediated the effect of relationship type on responsibility attributions. Compared to distant participants, close participants refrained from the SSB because of their more favorable impression of their partner.<sup>9</sup>

*Positive-contribution attributions.* We followed a similar strategy in examining the mediational role of partner impression in the effect of relationship type on the positive-contribution attributions. A conceptual replication of the responsibility attribution mediational results would be as follows: Relationship type would predict partner impressions, which in turn would predict the positive-contribution attributions.

We have already shown that relationship type predicted positive-contribution attributions,  $F(1, 102) = 5.23, p < .02$ , and that relationship type predicted partner impression. An ANOVA also demonstrated that partner impression ( $Mdn = 4.29$ ) predicted positive contribution attributions. Participants were more likely to display the SSB when they had an unfavorable impression of the partner ( $M = 5.33$ ) than when they had a favorable impression of the partner ( $M = 6.10$ ),  $F(1, 101) = 6.60, p < .01$ .<sup>10</sup>

Last, we examined the complete model with (a) relationship type and feedback type as independent variables, (b) positive-contribution attributions as the dependent variable, and (c) partner impression as a covariate. A mediational relation will be established if (a) the relationship type main effect becomes nonsignificant and (b) the partner impression effect remains significant. This was indeed the case. The relationship type main effect was not significant,  $F(1, 100) = 0.55, p < .46$ , whereas

the partner impression main effect was significant,  $F(1, 100) = 4.30, p < .04$ .

In conclusion, partner impression mediated the effect of relationship type on positive-contribution attributions. Compared to distant participants, close participants claimed a less positive contribution to the test outcome because of their more favorable impression of their partner.<sup>11</sup>

### Summary

Experiment 2 established partner impression as a mediator of the SSB. Members of relationally close dyads working on interdependent-outcomes tasks refrained from the SSB, in part because they formed a positive impression of the partner. As was the case with Experiment 1, the results were consistent with the relationships-as-bound hypothesis.

### GENERAL DISCUSSION

Social and personality psychology has maintained a persistent interest in viewing the self in relational context (Borden & Levinger, 1991; Holmes & Murray, 1996). The present investigation reflects this interest. The investigation was fueled primarily by two incompatible hypotheses. The relationships-as-bound hypothesis posits that close relationships place limits on an individual's self-enhancement tendencies. The individual is discouraged from using the relationship for his or her own benefit. This hypothesis does not anticipate the emergence of the SSB in close relationships. In contrast, the relationships-as-enabler hypothesis proposes that relationships act as enablers that protect and even enhance the individual's self-concept. Close relationships support, sustain, and even encourage an individual's self-enhancement tendencies. By implication, the individual should feel free to use the relationship for her or his own benefit. This hypothesis predicts the emergence (or even magnification) of the SSB in close relationships.

Members of either distant or close dyads worked on an interdependent-outcomes task (a creativity test), received bogus success or failure feedback at the dyadic level, and attributed the dyad's performance to either the self or the partner. Participants manifested the SSB when the partner was a distant other, whereas they refrained from the SSB when the partner was a close other. Also, compared to distant participants, close participants claimed that they made a less positive contribution to the task outcome. These findings are consistent with the relation-

<sup>8</sup> For reasons of presentational clarity and consistency, we opted to report in the text the ANOVA results rather than the more powerful regression results. The beta for the Partner Impression  $\times$  Feedback Type interaction was  $-1.65, t(99) = -3.40, p < .001$ .

<sup>9</sup> We repeated the steps of the interactional mediation analyses twice. Specifically, we assessed the mediational role of (a) liking for the partner (Questions 2, 5, 6, and 7 on the modified IJS) and (b) perceptions of partner ability (Questions 1, 3, and 4). In both cases the results of the mediational analyses were identical to the ones described in the text.

<sup>10</sup> The beta for the partner impression main effect was  $-0.30, t(101) = -3.13, p < .002$ .

<sup>11</sup> We repeated the results of the mediational analyses twice, as we had done for the responsibility question. The results were identical to those reported.

ships-as-bound hypothesis: Closely related individuals refrain from self-enhancement. Relationship closeness is an effective prescription for modesty.

Why do close partners refrain from the SSB? In Experiment 2 we tested an explanation based on favorable partner impressions: Close participants refrain from the SSB because they form a favorable impression of each other. Future research should focus on additional mechanisms in an effort to elucidate more precisely the relationships-as-bound hypothesis.

The results revealed reliable gender differences in the manifestation of the SSB. Men were more likely than women to display the SSB. This result is consistent with literature that reports gender differences in the manifestation of the SSB in independent-outcomes settings (Campbell & Sedikides, 1998). This gender difference has been attributed to men having higher success expectancies (Rosenfield & Stephan, 1978) and to men having higher global self-esteem (Harter, 1993) than women. On a related note, the two genders were not affected differently by closeness.

A remaining issue concerns the limitations in our measure of the SSB. Our research participants were constrained to allocate responsibility for the joint outcome between themselves and their partner. We selected this measure because we regarded it as the most direct test of the two hypotheses involved. On this measure, members of close dyads were less inclined to self-enhance compared to members of distant dyads. However, on many tasks in everyday life, individuals' attributional choices are less constrained. In a tennis doubles match, for example, players can make attributions to their team (as a unit), to the referees, or to the quality of the opposing team. As a result, self-serving attributions for the team's outcome, or for one's own contribution to that outcome, need not involve belittling one's teammates. Future studies will need to develop additional measurement strategies to test the external validity of our findings.

We opened this article with one of Murphy's laws. In light of our empirical findings, we are obliged to conclude with a revision of that law: "If more than one person is responsible for a miscalculation, and the persons are close, both will be at fault."

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