
Performance comparisons and attachment: An investigation of competitive responses in close relationships

ANTHONY SCINTA AND SHELLY L. GABLE
University of California, Los Angeles

Abstract

Two studies investigated whether affective responses to competitive performance situations are moderated by attachment style. In Study 1, participants ($n = 115$) imagined their reactions to a superior or inferior performance against their romantic partner or an acquaintance. Results showed that participants low in attachment avoidance, relative to those high in avoidance, indicated more positivity after an inferior performance (empathy effect) to their partners, and this finding held only in domains of high importance to the partner. In Study 2, participants ($n = 53$) imagined comparisons with their partner or a close friend. Low-avoidance participants, relative to high-avoidance participants, exhibited sympathy and empathy effects in comparisons involving their romantic partner but not those involving a friend. The findings are discussed in terms of one's model of other and perceived self–other separation, which are defined by avoidance but not anxiety.

People generally enjoy outperforming others, and they tend to dislike being outperformed. In fact, people exhibit this tendency even when the comparison person is a friend who suffers the outcome (Tesser, 1988). But what if the comparison person is a romantic partner? If we are willing to hurt the ones we like, does that also mean we will hurt the ones we love? Easy answers to this question are not forthcoming. Few lines of research have directly examined competition in intimate relationships. The Self-Evaluation Maintenance model (SEM) (Tesser, 1988; Tesser & Campbell, 1980; Tesser & Smith, 1980) accounts for how people respond to performance situations (i.e., doing better or worse than another) but only against friends and strangers. The model

has struggled to answer questions about how people respond when they fare better or worse than a romantic partner (Beach et al., 1998). Tesser and his colleagues have proposed an “extended model” to explain self-evaluation processes within close relationships, but the amended theory has received mixed empirical support (Beach et al., 1998). More recent investigations have explored the role of relationship factors in competitive situations and have made promising strides in determining how people respond to a superior or inferior performance to a close other (Exline & Lobel, 2001; Locke & Nekich, 2000; McFarland, Buehler, & McKay, 2001). However, the picture painted by these findings is unclear and occasionally contradictory, and still tells us little about situations in which people know whether their partners did better or worse than them (as opposed to merely knowing how well their partners fared). This paper builds on the framework outlined by previous studies on competitive performance situations and social comparisons involving romantic partners, but introduces attachment style as a key individual difference variable to account for equivocal

Anthony Scinta is now at the Department of Psychology, Williams College; Shelly L. Gable, Department of Psychology, University of California, Los Angeles.

We would like to thank Emily Impett and the Close Relationships lab at UCLA for their suggestions on earlier drafts of the paper.

Correspondence should be addressed to Anthony Scinta, Williams College, Department of Psychology, Williamstown, MA 01267, e-mail: tscinta@williams.edu.

findings in the literature and address unanswered questions.

Performance comparisons

There is evidence that our standing relative to others in nearly any imaginable performance domain can exercise a meaningful influence on relationships. A sizable body of social comparison research consistently demonstrates that outperforming others can be a substantial source of positive affect and confidence (Dias & Lobel, 1997; Exline & Lobel, 2001; Taylor & Armor, 1996; Wills, 1981). Conversely, being outperformed by another can be an intensely unpleasant experience (Brickman & Bulman, 1977) and may lead to feelings of envy and diminished self-esteem (e.g., Gilbert, Giesler, & Morris, 1995; Salovey & Rodin, 1984). Prior research also indicates why it may be crucial to look at performance comparisons in the context of intimate relationships. For one, a superior performance has positive ramifications for the outperformer but may be damaging to the person outperformed, particularly when the outperformer expresses pleasure with the outcome. Moreover, people frequently assume that close others will respond to their successes in positive and supportive ways (Paludi & Frankell-Hauser, 1986). In fact, research has shown that seeking empathy and support is one of the principal reasons why people seek social comparisons following a poor performance (Hegelson & Mickelson, 1995). To the extent that romantic partners do not react favorably, these comparisons may be damaging to the relationship. Indeed, related research on outperformance, though not focused exclusively on intimate relationships, has indicated that doing better than another can be a cause of relationship strain (Exline & Lobel, 1999).

One of the more thorough examinations of performance comparisons among relationships of varying closeness is Tesser's Self-Evaluation Maintenance (SEM) model (1988). Research on the SEM model has demonstrated that people not only resent the superior performance of a close other (i.e., a friend) but in some situations would actually rather be outperformed by someone less close (e.g., a stranger). Specifically, if a performance domain is important to

the subject, they will try harder to outperform a friend than a stranger (Tesser & Campbell, 1982). Conversely, in relatively unimportant performance domains, subjects would rather see a friend do well than a stranger. For the purposes of this paper, "performance domain" is a broad term, encompassing any measurable outcome that could be used to compare one's performance, skill, or ability relative to another. Thus, it can range from math ability to yearly income to who is a better fan of their respective football teams. Likewise, a "performance comparison" is when a person measures their standing relative to another in a performance domain. If I observe that a friend seems to have the upper hand in the looks department, I have just made a performance comparison (and come up regrettably short).

As researchers noted, the processes described by the SEM model are not congruent with our understanding of how romantic relationships work (e.g., Pilkington, Tesser, & Stevens, 1991). In good relationships, at least, people do not strive to constantly outperform their partner in self-relevant domains, mainly due to the aforementioned strain it may cause. Accordingly, Tesser and colleagues crafted an extended SEM model, which proposed that relationship intimates will respond more favorably to their partner's SEM needs (relative to less intimate others). Consequently, the amount of pleasure a person can glean from a positive comparison (i.e., outperforming his/her partner) will be attenuated by perceiving that the partner is suffering a negative outcome (in an area of high importance to the partner). This is an effect of "sympathy." In a similar fashion, a person stands to lose less when outperformed by his or her partner in an area of high importance *to the partner*. This is an effect of "empathy." Thus, if I feel less pleasant than I otherwise would because I beat my partner at tennis, her favorite sport, this is a sympathy effect. If I feel less unpleasant because my partner trounced me in chess, despite my affinity for the game, this is an empathy effect.

A series of experiments have offered some support for this hypothesis (Beach et al., 1998). Outperforming one's partner in an area of high partner importance did in fact decrease the

pleasantness of a positive comparison but *only* if the area was low in self-importance. Likewise, high partner importance served to increase the pleasantness of being outperformed by the partner in a domain of low self-importance but *not* in a domain of high self-importance. Apparently, people harbor a certain degree of goodwill toward their partners, but their altruistic feelings wilt when the stakes are raised. However, in two of the experiments, the predicted effects surfaced among highly satisfied and committed couples. The findings were not particularly strong, nor were they present in their other two experiments, but from them springs the notion that relatively stable factors of a relationship or, in our case, the individual may be an integral part of the performance comparison process.

Attachment

In our view, there are two principal reasons why an individual's attachment orientation should moderate responses to performance comparisons involving a romantic partner. The first can be traced to the fundamental notion of attachment as a model of self and other (Bartholomew & Horowitz, 1991). We reason that the effects of sympathy and empathy require a positive model of other but not necessarily a positive model of self. In the context of a performance comparison, sympathy and empathy are essentially *concessions* a person makes for the sake of a close other. In other words, the individual concedes the benefits of a superior performance (feelings of pleasantness) and endures the drawbacks of an inferior performance. This is done mainly out of concern for the partner's well-being. In other words, whether one views the self as deserving of affection should be only weakly linked to a willingness to make concessions for romantic partners. Conversely, whether one views others as distant and unaffectionate or close and responsive should have tremendous bearing on our willingness to make concessions for them. This means that people who score low in avoidance should exhibit sympathy and empathy effects, whereas people who score high in avoidance should not show this pattern of responses. The anxiety dimension, because it

relates to the model of self, will not moderate responses to performance comparisons.

The caregiving literature provides tangential support for this proposal. For example, research has shown that the avoidance dimension, but not anxiety, is linked to one's prosocial orientation toward his or her partner (B. C. Feeney & Collins, 2001). Here "prosocial orientation" was defined as a composite of empathy and communion. This is particularly noteworthy because research on social comparison has shown that those with a more communal orientation tend to use performance comparisons to establish a feeling of connectedness with the other, whereas those with a more agentic orientation use these comparisons to establish feelings of confidence, mainly by focusing on situations in which they are the outperformer (Locke & Nekich, 2000).

A second reason for focusing on the avoidance dimension is that it helps define the line between self and other in a relationship. Recent research has shown that people exhibit favorable responses (e.g., show sympathy effects) in performance situations involving the romantic partner when the couple shares an "identity" relationship—that is, a relationship characterized by a high level of dependency, mutual concern, and a feeling that the other is psychologically indistinguishable from the self (McFarland et al., 2001). This research showed stronger evidence of sympathy and empathy among people involved in an identity relationship than among those involved in a "unit" relationship (which is characterized mainly by shared attitudes and cooperative interactions). McFarland and colleagues argued that when there is an overlap between one's concept of self and other, as in an identity relationship, there is sympathy and empathy because the partner's outcomes belong to the self (i.e., their successes and failures are our own). The avoidance dimension, in a related sense, is another means of defining the distinction between self and other. Avoidance has been referred to as the degree to which a person will approach intimacy and interdependence with a romantic partner (Bartholomew & Horowitz, 1991; Collins & Feeney, 2000). Thus, when a person is high in avoidance, there should be a clearer separation between self and

other. When a person is low in avoidance, the distinction, by definition, should be more blurred. Consequently, a low-avoidance person will be more likely to feel sympathy and empathy because his or her partner's needs and interests overlap with his or her own. Attachment anxiety, because it is based on the model of self, will be unrelated to this degree of self–other overlap.

It should be noted that in McFarland's studies, the sympathy and empathy effects were revealed only when feedback about one's own performance was not explicit (i.e., the subject learned or imagined that the partner experienced an exceptional or subpar performance but did not receive any information about his or her own performance). When subjects were explicitly told that they fared better or worse than their partners, there was little evidence of sympathy or empathy. This is a crucial point because we are particularly interested in a person's response when they know how they stack up relative to another. Sharing in the success of a romantic partner (i.e., empathizing) may be relatively easy when one can imagine that he or she also would have done well but more difficult when one knows that he or she was the inferior performer.

There are two other reasons why we prefer attachment to other variables—particularly closeness—that might moderate the existence of sympathy and empathy effects. First, avoidance involves a model of other components that is not explicitly part of other closeness variables. Second, prior research has studied the link between relationship-specific factors (e.g., satisfaction, commitment) and performance comparison outcomes, but to our knowledge, virtually no research has examined more stable individual difference variables. Granted, our understanding of performance comparisons will benefit from the study of these relationship factors, but for the most part, these variables (commitment, satisfaction) are functions of a given relationship that are susceptible to shifts over time and with different partners (Sprecher, 1999). By contrast, attachment has been conceptualized, from both a theoretical and empirical standpoint, to be a relatively more stable characteristic of the individual

(Bowlby, 1969/1982; Hazan & Shaver, 1987, 1994).¹

The general prediction is that low-avoidance individuals will exhibit greater evidence of sympathy and empathy effects than those high in avoidance. Stated formally

Empathy hypothesis:

Individuals low in avoidance, relative to those high in avoidance, will feel more pleasant when being outperformed by their partners.

Sympathy hypothesis:

Individuals low in avoidance, relative to those high in avoidance, will feel less pleasant when outperforming their partners.

In terms of empathy, pleasantness will be construed as more positivity and less negativity when being outperformed. For sympathy, it means less positivity and heightened negativity when one is the outperformer. We are mainly interested in comparisons involving performance domains of high importance to the self because areas of high importance yield the most interesting results and yet conceal the most pressing questions (Beach et al., 1998; Exline & Lobel, 2001). It is in domains of high importance that affective responses to success and failure promise to be strongest (Tesser, 1988; Tesser & Cornell, 1991; Tesser & Smith, 1980). Thus, partners will be perceived to suffer more by an inferior performance in something that is more important to them, leading low-avoidance individuals to experience sympathy; they will be perceived to gain more from a superior performance in a highly important domain, leading low-avoidance individuals to experience empathy. Stated formally

1. Despite a failure of consensus, the literature generally supports the stability of attachment (Davila, Burge, & Hammen, 1997; Kirkpatrick & Hazan, 1994), especially when controlling for the unreliability of measures (Scharfe & Bartholomew, 1994).

Importance hypothesis:

Effects of sympathy and empathy will surface for domains of high importance to the partner but not among those of low importance to the partner.

Overview of present studies

Perceived success or failure in relation to a romantic partner is virtually unavoidable. The overarching goal of the research is to demonstrate how the attachment dimension of avoidance interacts with one's responses to these performance comparisons involving his or her romantic partner. By demonstrating these effects among couples, but not friends or acquaintances, we hope to show that attachment style has a singular impact on romantic relationships that does not even extend to close platonic relationships. Unlike prior studies that demonstrated some evidence of sympathy and empathy, we hope to show that the effects can emerge in domains of high self-importance and when feedback about the performance outcome is explicit.

We tested our hypotheses using two thought experiments such as those employed by prior research (e.g., Beach et al., 1998; McFarland et al., 2001). The primary goal of the first study was to examine how attachment corresponded to a person's predicted responses to performance comparisons involving either their romantic partner or an acquaintance. The second study looked at similar performance comparisons involving the romantic partner and a close friend. The two studies combined were expected to provide an understanding of the relationship between attachment style and competitive responses to a diverse cross section of comparison others.

Study 1

Participants and design

Study 1 included 86 female and 27 male psychology students at UCLA involved in a long-term romantic relationship. Their mean relationship length was 13.17 months ($SD = 10.78$). They took part individually or in small

groups in exchange for class credit. The experiment employed a 2 (outcome: self better, other better) \times 2 (comparison person: partner, acquaintance) within-subjects design. Unlike several prior studies, self-importance (high, low) was not included as an independent variable because we were primarily interested in comparisons when self-importance is high. Attachment orientation, represented by the anxiety and avoidance dimensions, served as a between-subjects covariate.

Attachment

The attachment measure asks participants to rate the extent to which each of the attachment prototypes describes them on a 7-point scale anchored at the endpoints by *not like me* and *exactly like me*. They then indicated which of the styles described them best. Following B. C. Feeney and Collins (2001), we computed an avoidance dimension by subtracting the sum of the secure and preoccupied ratings from the sum of the dismissing and fearful ratings, such that a higher positive score indicated more avoidance ($M = -0.84$). An anxiety dimension was computed by subtracting the secure and dismissing ratings from the preoccupied and fearful ratings, such that a higher positive score indicated more anxiety ($M = -1.07$).

Satisfaction

The satisfaction scale (Hendrick, 1988) consists of seven items that assess general satisfaction with the relationship ($\alpha = .88$), answered on a 7-point scale (e.g., "How good is your relationship compared to most?"). This questionnaire was followed by pertinent demographic questions (e.g., length of relationship, age, gender).

Comparison scenarios

Each experimental session involved 2–6 participants. Subjects were told their task was to imagine a number of performance situations, some of which involve an inferior performance to another person (partner or acquaintance), and others involving a superior performance

to another person. It was stressed that even if a situation like the one posed in a scenario had never happened, they should try to imagine what it would be like if it actually did happen. Before reading the scenarios, participants selected an acquaintance who could serve as the comparison person in every acquaintance scenario (“acquaintance” was defined as someone “you do not know very well, but whom you see around from time to time”). Participants were told to choose an acquaintance of the same gender as their romantic partners (so as not to confound the closeness variable—partner vs. acquaintance—with gender). Detailed instructions explained how to imagine the scenarios and provided reminders of confidentiality and anonymity to help ensure honest responding.

The materials were divided into four blocks containing six scenarios each. The six scenarios represented the six different performance domains (social skills, academics, attractiveness, arts, popularity, and sports). The scenarios were detailed enough so that participants would understand what was being asked of them but not so specific that participants felt constrained in their responses. Pilot testing revealed that we had met these goals. An example scenario read as follows: “Imagine that you and your romantic partner are enrolled at the same university and take similar classes. At the end of the first quarter, you find out that your romantic partner finished with a considerably higher grade point average than you did. Please rate how you would feel in this situation.” Participants then indicated both their positive and negative responses to the situation on a separate 10-point scale anchored at the endpoints by 1 (*not at all positive (negative)*) and 10 (*extremely positive (negative)*).

After each of the six scenarios, participants indicated the importance of the domain to themselves, their partners, and a stranger (1 = *not at all important* and 7 = *extremely important*). Each block of scenarios represented a single cell in a performance comparison matrix created by crossing outcome (self better, self worse) with comparison person (partner, acquaintance). The four blocks were counterbalanced to control for order effects. Altogether, each participant completed 24

scenarios, which is a considerable amount, but each scenario was brief, and we tried to make the subjects’ task less taxing by requiring responses to only two dependent variables for each scenario (positivity and negativity). After completing the scenarios, the participants filled out the relationship and demographic measures.

Results

The participants’ ratings of the importance of each domain were used to define the importance to self and other. The mean and median of the domains were slightly higher than the midpoint of the scale ($M = 5.23$, $Mdn = 6$, across the six domains). First, we examined self-ratings and chose only domains high in self-importance. Next, we examined importance to other with the goal of choosing a single performance domain for each of the required cells: low to partner, high to partner, low to acquaintance, and high to acquaintance. Though we had hoped that participants would rate at least one domain below the midpoint of the importance scale, the ratings were generally quite high for both the self and the comparison person. We had difficulty establishing separate domains of high and low importance to the comparison person (partner/acquaintance), and thus we encountered a missing data problem because many subjects simply did not rate any performance domains below the midpoint for themselves and/or the comparison person. We chose to address this problem by using data solely from those participants who provided information for both critical cells in a given analysis (e.g., partner importance low and partner importance high). As a result, the number of subjects differed depending on the number of cells in the analysis. In the analyses involving three factors (e.g., attachment, performance outcome, and comparison person), the number of subjects ranged from 28 to 50. In the analyses involving two factors (e.g., attachment and performance outcome), the number of subjects ranged from 43 to 64. For each comparison, we examined positive and negative responses separately. Prior research has suggested that separate analyses of positive and negative affect may be preferable to

the difference scores (e.g., positive minus negative) sometimes used in studies of this kind (Exline & Lobel, 2001), and the moderate correlation we found between the positive and negative dependent variables ($r = -.564$) indicated likewise. Thus, we examined the positivity and negativity of response as a function of avoidance and performance comparison in a series of analyses with outcome (self better, other better), comparison person (partner, acquaintance), and partner importance (high, low) as within-subjects variables and avoidance as a between-subjects factor (covariate) using a mixed-model analysis of variance (ANOVA).² To interpret the results of the interaction between avoidance and the within-persons factor, we calculated cell means for a person 1 standard deviation below the mean of avoidance (low avoidance) and 1 standard deviation above the mean (high avoidance). In all analyses, we focused on domains that were high in importance to the self. An alpha level of .05 was used for all statistical analyses.

Outcome analyses

We first examined the interaction of outcome (self better, self worse) and comparison person (partner, acquaintance) in a repeated-measures ANOVA with avoidance as a between-subjects covariate. The expected three-way interaction of outcome, comparison person, and avoidance was significant for the positive dependent variable, $F(1, 41) = 5.131, p = .029$. To more closely examine this interaction and uncover possible effects of sympathy and empathy, we conducted separate two-way analyses of comparison person and avoidance for each type of outcome (self better, other better). First, in performance comparisons in

which the comparison person did better, we observed a significant main effect of comparison person, $F(1, 43) = 4.297, p = .045$. Consistent with prior research on performance comparisons, participants said they would feel more positive when outperformed by their partners ($M_{part} = 4.389$) than when outperformed by an acquaintance ($M_{Acq} = 3.204$). Importantly, this effect was qualified by a significant two-way interaction of comparison person (partner better, acquaintance better) and avoidance, $F(1, 41) = 5.173, p = .028$. When outperformed by their partners, low-avoidance subjects were significantly more positive than those high in avoidance ($M_{HA} = 3.215, M_{LA} = 5.563$), $t(41) = 3.326, p = .002$ (effect of empathy). However, as expected, low- and high-avoidance subjects did not differ when outperformed by an acquaintance ($M_{HA} = 3.099, M_{LA} = 3.309$), $t(41) = .278, p = ns$ (see Figure 1). Contrary to the sympathy hypothesis, there was no interaction of avoidance and comparison person when the self outperformed the comparison person, $F(1, 41) = 1.28, p = ns$.

Importance analyses

We also examined whether the empathy effect depended on the level of domain importance to the comparison person by conducting a repeated measures ANOVA of comparison person (partner better, acquaintance better) and importance (high, low), with avoidance

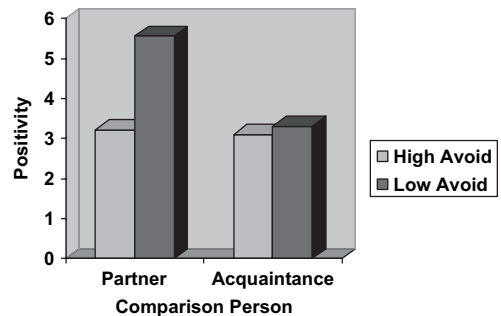


Figure 1. Mean self-reported positivity among high- and low-avoidance subjects when outperformed by their romantic partners or an acquaintance (Study 1).

2. In a mixed-model ANOVA with a within-persons factor and a between-persons covariate, three types of effects are tested. First, the within-persons main effect (e.g., did positivity differ as a function of partner vs. acquaintance?). Second, a between-persons main effect (e.g., does attachment avoidance predict average positivity?). Third and most crucial to the present studies is the interaction between the within-persons factor and the between-persons covariate (e.g., is the difference in positivity between the partner and acquaintance comparisons moderated by attachment avoidance?).

as a between-subjects covariate. As expected, the analyses revealed a three-way interaction of comparison person, importance, and avoidance, $F(1, 26) = 5.745, p = .024$. As reported above, the interaction of outcome (partner better, acquaintance better) and avoidance was significant when partner importance was high ($p = .002$) but not when partner importance was low, $F(1, 64) = 1.138, p = ns$. In other words, low-avoidance participants expressed empathy (i.e., felt more positive) when partners did well in a domain of high partner importance but not when partners did well in domains of low partner importance.

Supplementary analyses

All analyses described above were conducted using attachment anxiety as a covariate to predict the positive and negative dependent variables. None of the analyses were significant (all $p > .05$). It appears that, as hypothesized, responses to SEM situations are uniquely linked to the attachment dimension of avoidance.

We also wanted to ensure that the effects of avoidance still held when controlling for relationship satisfaction. To test this, we reanalyzed the data, only now with relationship satisfaction entered as a covariate along with avoidance. All of the interactions reported in the preceding section remained significant, even when controlling for mean relationship satisfaction (all $p < .05$). Of key interest, the three-way interaction of outcome (self better, other better), comparison person (partner, acquaintance), and avoidance (with positivity as the dependent variable) remained significant when controlling for relationship satisfaction, $F(1, 40) = 4.549, p = .039$. Likewise, the effect of empathy revealed by the significant interaction of comparison person (partner better, acquaintance better) and avoidance (with positivity as the dependent variable) remained intact when controlling for relationship satisfaction, $F(1, 47) = 4.594, p = .038$ (positivity as the dependent variable). There were no significant interactions with mean satisfaction as the sole covariate (all $p > .05$). Thus, relationship satisfaction, which one might expect to be a powerful predictor of one's sympathy and empathy for their partner (e.g., Exline &

Lobel, 1999), did not moderate subjects' responses to performance comparisons.

Discussion

Study 1 provided considerable support for the empathy hypothesis with positivity as the dependent variable. Participants low in avoidance seemed to respond more favorably to their partners' needs than those high in avoidance, though somewhat stronger in terms of positive rather than negative feelings. Importantly, avoidance did not appear to make a meaningful difference in performance comparisons involving the acquaintance. When pitting self-interest against partner interest, it was clear that low-avoidance individuals, compared to highs, said they would feel better when outperformed by their partners than when outperformed by an acquaintance. Moreover, this effect only emerged in domains of high importance to the partner, which presumably is when it is more important for the partner to succeed. Unexpectedly, the effect of sympathy did not emerge in these analyses. One possibility is that low-avoidance individuals simply do not sympathize with their partners more than those high in avoidance. However, another possibility is that Study 1 lacked the manipulation strength to fully elicit this effect, and the power to properly assess it.

A major aim of Study 2 was to conduct a more powerful assessment of the sympathy effect. We also sought to test comparisons involving the romantic partner and a close friend. Our decision to test comparisons with a friend allows us to distinguish attachment from closeness, familiarity, liking, and related interpersonal variables as explanations for the findings. Friends are close and well liked, but they should not activate the attachment system to the same degree as a romantic partner. The switch from acquaintance to friend also is advantageous from the perspective of the SEM model (Tesser, 1988; Tesser & Campbell, 1982) and research on social comparisons (Locke & Nekich, 2000). Tesser's research has shown that individuals experience attenuated pleasantness when competing against an acquaintance because they care less about the success or failure. Likewise, individuals are

expected to experience attenuated pleasantness when competing against their partners because they feel less good when doing better and less bad when doing worse (in accordance with the sympathy and empathy hypotheses). The strongest comparison, then, is not when comparing partner and acquaintance, which both involve attenuated feelings, but when comparing partner against friend. Traditionally, the most extreme feelings are aroused in performance comparisons involving a friend (Tesser, 1988; Tesser & Campbell, 1982; 1980). A major aim of Study 2, then, was to directly test comparisons involving the partner and a friend, and in doing so perhaps allow the emergence of the sympathy effect along with effects involving the negative dependent variable. We also wanted to use a measure of attachment specifically designed to assess dimensions rather than styles. Study 2 addresses this shortcoming by incorporating a 36-item measure designed specifically to assess the attachment dimensions of anxiety and avoidance.

Study 2

The method of Study 2 was similar to that of Study 1, with a few key modifications. First, as noted above, the comparison person was either the participant's partner or a friend (acquaintance was omitted). Second, we hoped to address the missing data problem of Study 1 by changing the operational definition of high and low domain importance. We did this by asking participants to choose their own performance domains. Each domain was high in self-importance, but there were four different levels for the comparison person: high to partner, low to partner, high to friend, and low to friend. By asking participants to preselect domains based on their importance, we reduced the risk of missing data for any level of importance.

The hypotheses for Study 2 mirror those for Study 1. Of particular interest was whether the sympathy effect would emerge, and whether the empathy effects would surface with the negative dependent variable. We also wanted to determine if attachment would moderate responses to performance comparisons involving a romantic partner but not a close friend.

Participants and design

Participants were 45 female and 8 male psychology students at UCLA involved in a long-term romantic relationship ($M = 20.92$ months, $SD = 17.16$). The experiment employed a 2 (outcome: self better, other better) \times 2 (comparison person: partner, friend) \times 2 (importance: high to self and other, high to self and low to other) within-subjects design. As in Study 1, attachment style served as a between-subjects covariate.

Measures

Participants completed the four-item attachment measure and the satisfaction scale used in Study 1. In addition, they completed the Experiences in Close Relationships Inventory by Brennan, Clark, and Shaver (1998), which consists of 36 items designed to assess the dimensions of anxiety and avoidance. The anxiety dimension ($\alpha = .90$) comprises the subscales preoccupation, jealousy/fear of abandonment, and fear of rejection. The avoidance dimension ($\alpha = .90$) comprises the subscales avoidance of intimacy, discomfort with closeness, and self-reliance. To measure satisfaction, we used the same seven-item scale as in Study 1 ($\alpha = .84$). Unlike in Study 1, we assessed feelings of self-other overlap with the single-item Inclusion of Other in Self scale (IOS) (Aron, Aron, & Smollan, 1992).

Procedure

Study 2 was conducted in the same fashion as Study 1. Participants were given an experimental packet, and the printed instructions were read out loud by the experimenter. For the performance scenario measure, participants were told that their task would be to imagine a number of situations involving either their romantic partners or a friend in which they sometimes fare better than the other person and sometimes fare worse. Participants were instructed to choose a friend who could serve as a comparison person in each of the "friend" scenarios. The instructions asked participants to choose a friend who would be a 4 on a scale anchored at the

endpoints by 1 (*acquaintance*) and 5 (*best friend*). They were instructed to choose a friend of the same gender as their romantic partners.³ Performance domain was defined as “any activity, skill, ability, personality characteristics, etc., in which one person’s performance or standing can be compared to another’s performance or standing. It can range from academic ability, to social skills, to how good you can act.” The definition further specified that an important performance domain for one person might be ballet, for another it could be tennis or physical attractiveness. Participants chose a wide array of domains, from the universal (e.g., academic performance) to the more idiosyncratic (e.g., debating skills, guitar playing). The remainder of the packet consisted of a series of brief vignettes. Each vignette corresponded to a cell in our design. For example, in the high importance to self and partner cell, participants first thought of a performance domain of the appropriate importance, then rated the importance of the domain, and finally indicated how positive and negative they would feel when outperforming their partners or being outperformed. After finishing the 24 scenarios, participants completed the four-item attachment scale, the Experiences in Close Relationships Inventory, the relationship satisfaction measure, and the demographics questions.

Results

Outcome analyses

Consistent with Study 1, self-importance was high in all analyses. We used an alpha level of .05 for each analysis and report the results for the positive and negative dependent variables separately. We first conducted a 2 (outcome: self better, self worse) \times 2 (comparison person: partner, friend) repeated measures ANOVA with attachment-related avoidance as a between-subjects covariate. The anticipated three-way interaction of outcome, com-

parison, and avoidance was significant for both dependent variables, $F_{\text{pos}}(1, 51) = 13.797, p = .001$ and $F_{\text{neg}}(1, 51) = 9.014, p = .004$. To break down this interaction and check specifically for the presence of sympathy and empathy, we conducted two-way analyses of comparison person (partner, friend) and avoidance for each outcome (self better or other better) separately. Consistent with prior research, in the analysis of empathy, there was a significant main effect of comparison person for each dependent variable, $F_{\text{neg}}(1, 51) = 12.441, p = .001, F_{\text{pos}}(1, 51) = 17.203, p < .001$, such that participants felt less negative ($M_{\text{part}} = 5.658, M_{\text{frd}} = 6.266$) and more positive ($M_{\text{part}} = 5.193, M_{\text{frd}} = 3.943$) when outperformed by their partners than by a friend. More importantly, the predicted interaction of other better (partner better, friend better) and avoidance was significant for both positivity and negativity, $F_{\text{pos}}(1, 51) = 9.746, p = .003$ and $F_{\text{neg}}(1, 51) = 10.596, p = .002$. As seen in Figure 2, low-avoidance subjects, relative to high-avoidance subjects, said they would be more positive when outperformed by their partners ($M_{\text{HA}} = 6.846, M_{\text{LA}} = 4.217, t(51) = 3.174, p = .003$), but did not differ in comparisons involving the friend ($M_{\text{HA}} = 3.780, M_{\text{LA}} = 3.556, t(51) = .360, p = ns$). Likewise, relative to high-avoidance subjects, those low in avoidance indicated significantly less negativity when being outperformed by their partners ($M_{\text{HA}} = 6.532, M_{\text{LA}} = 4.785, t(51) = 2.687, p = .01$), and marginally more negative when being outperformed by

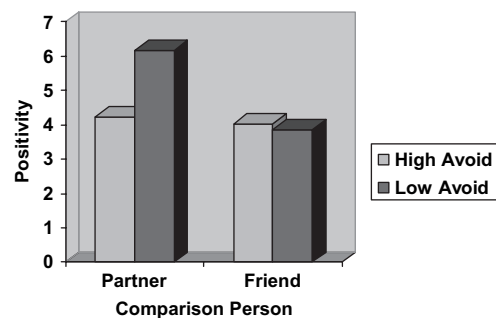


Figure 2. Mean self-reported positivity among high- and low-avoidance subjects when outperforming their romantic partners versus a friend (Study 2).

3. Eight participants chose a friend of the gender opposite their romantic partners because they were unable to think of a friend of the same gender. These participants did not differ systematically from the others.

a friend ($M_{HA} = 5.702, M_{LA} = 6.830$). Both findings are consistent with an effect of empathy (see Figure 3).

In the test of sympathy, we observed a significant main effect of comparison person for the positive dependent variable, $F(1, 51) = 6.320, p = .015$. Participants felt less positive when outperforming their partners ($M_{Part} = 7.339$) than when outperforming a friend ($M_{Frd} = 7.829$). Of key interest, the data also revealed a significant interaction of self better (partner worse, friend worse) and avoidance with the positive dependent variable, $F(1, 51) = 4.448, p = .040$, such that low-avoidance subjects, relative to highs, said they would feel less positive when outperforming their partners ($M_{HA} = 7.720, M_{LA} = 6.958$) and marginally more positive when outperforming a friend ($M_{HA} = 7.556, M_{LA} = 8.103$; see Figure 4). This effect did not emerge with the negative dependent variable, $F(1, 51) = .267, p = ns$. Thus, unlike Study 1, which only yielded an effect of empathy, the present study found evidence for both the predicted sympathy and empathy effects, particularly with the positive dependent variable.

Importance analyses

We conducted further analyses to determine whether the observed sympathy and empathy effects were contingent on the importance of the domain to the comparison person. To this end, we conducted two repeated measures ANOVAs with avoidance as a between-

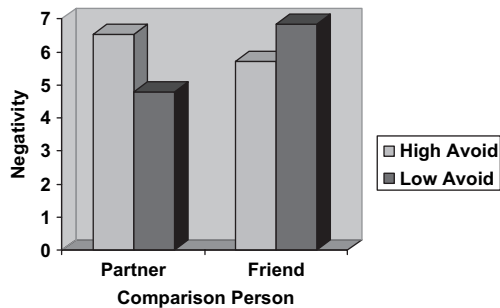


Figure 3. Mean self-reported negativity among high- and low-avoidance subjects when outperformed by their romantic partners or a friend (Study 2).

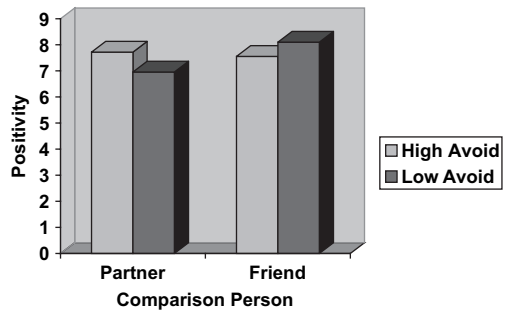


Figure 4. Mean self-reported positivity among high- and low-avoidance subjects when outperforming their romantic partners or a friend (Study 2).

subjects covariate. The first analysis crossed importance to other (high, low) with self better (partner worse, friend worse) to test the sympathy effect, and the second analysis crossed importance to other with self worse (partner better, friend better) to test the empathy effect. Contrary to expectations, the first analysis failed to reach significance with either of the dependent variables (both $p > .05$), indicating that the sympathy effect did not depend on the level of importance to the comparison person. The second analysis was significant with negativity as the dependent variable, $F(1, 51) = 3.988, p = .050$, indicating that this effect of empathy was contingent on importance to other. As predicted, the interaction of outcome (partner better, friend better) and avoidance was significant when partner importance was high ($p = .002$) but not when partner importance was low, $F(1, 51) = .808, p = ns$.

Supplementary analyses

As in Study 1, we conducted all of the aforementioned analyses again, only this time with the anxiety dimension as the between-subjects covariate. Similar to Study 1, there were no significant interactions involving attachment-related anxiety for either the positive or the negative dependent variables. We also conducted the analyses controlling for mean relationship satisfaction using both the positive and the negative dependent variables. Consistent with Study 1, we expected the sympathy and empathy effects to hold even when

controlling for mean relationship satisfaction. With one exception, this was indeed the case. The only expected interaction that did not emerge when controlling for satisfaction was the effect of sympathy with positivity as the dependent variable, $F(1, 51) = 2.212$, $p = .138$, though the results remained in the predicted direction. Furthermore, as in Study 1, mean relationship satisfaction did not significantly moderate any of the responses when entered into the analysis along with avoidance. This again demonstrates the power of avoidance in predicting one's responses to performance comparisons involving their romantic partner.

We also conducted the full set of analyses with both avoidance and IOS as covariates. In these analyses, all of the significant interactions involving avoidance remained significant or marginally significant. When IOS was entered as the sole covariate in the analysis set, we observed a significant interaction of outcome (self better, other better), comparison person (partner, friend), and inclusion with positivity as the dependent variable, $F(1, 48) = 5.703$, $p = .021$. This interaction suggested both an effect of sympathy and empathy, but neither effect was significant when examined separately ($p = .09$ for sympathy, $p = .071$ for empathy). In both cases, those who said their partners were more included in the self (high IOS) showed more evidence of sympathy and empathy than those low in IOS.

Brief Summary of Study 2

Study 2 provided additional support for our hypotheses. The effect of empathy was particularly strong, emerging with both the positive and negative dependent variables. In other words, low-avoidance participants, relative to those high in avoidance, said they would be more positive and less negative when outperformed by their partners. Furthermore, this finding only emerged in domains of high importance to the comparison person, which is precisely when the partner stands to gain the most from a flattering comparison. However, this was only true of the negative dependent variable. We also observed a significant effect of sympathy with positivity as the

dependent variable—low-avoidance participants, relative to highs, said they would be less positive when outperforming their partners. However, the effect of sympathy did not appear with negativity as the dependent variable, nor was the positive effect contingent on domain importance, but it emerged only when partner importance was high. As expected, the sympathy and empathy findings were significantly weaker among high-avoidance individuals, and there was no indication of the effects when the participant's friend was the comparison person. This again underscores the unique association between attachment style and romantic relationships, an association that fails to hold even for close friends. As expected, anxiety did not moderate responses to competitive situations in the same fashion, and the interactions involving avoidance could not be explained by relationship satisfaction or inclusion (IOS).

General Discussion

Taken together, Studies 1 and 2 provide support for the existence of stronger empathetic and sympathetic responses among individuals low in avoidance than those high in avoidance. This finding adds to prior research on performance comparisons among close others. In the social comparison literature, research has shown that people are more sympathetic when outperforming a liked than a disliked person (Exline & Lobel, 2001), but these studies have not focused exclusively on romantic partners. In two of their four studies on comparison processes in close relationships, Beach et al. (1998) found evidence of sympathy and empathy effects, but only when self-importance was low, which presumably is when people care less about their outcomes in performance comparisons. Likewise, McFarland et al. (2001) showed sympathy and empathy in identity relationships but not when feedback was explicit (i.e., when participants knew they had fared better or worse than the comparison person). Thus, a major goal of this research was to discern whether romantic partners might exhibit the predicted effects under conditions of high self-importance and when explicitly told how they fared in relation to the comparison person.

The answer, we found, is that it depends largely on one's attachment orientation; those who are low on the avoidance dimension of attachment will exhibit sympathy and empathy responses, but those high in avoidance, relatively speaking, will not. The anxiety dimension, as hypothesized, was unrelated to comparison responses. The results regarding avoidance also are consistent with the preexisting literature on attachment. For example, B. C. Feeney and Collins (2001) found that as avoidance increased, prosocial motivation (a composite index of empathy and communal orientation) decreased, but they did not find a corresponding link between anxiety and prosocial motivation. The empathy index used in this study tapped concern about others, perspective-taking ability, and emotional involvement with other's distress. These are exactly the types of characteristics required for a person to be capable of expressing sympathy and empathy. Related research on support seeking and caregiving (Collins & Feeney, 2000) underlines another key difference between high- and low-avoidance individuals. High avoidance, but not low avoidance, was associated with an emphasis on independence and self-reliance (dismissing style) and an avoidance of intimacy (fearful style). Thus, individuals high in avoidance appear to be those who, rather than rely on others, carve their own path to high feelings of self-worth, and thus may see performance comparisons in a more competitive light.

These findings, in conjunction with our own results, describe the person low in avoidance as someone whose interests are intertwined with a romantic partner of whom they harbor a generally positive partner model. These two factors, in turn, lead to favorable responses involving the partner. It is equally important to note that low avoidance does not indicate a *general* pattern of favorable responses. Subjects low in avoidance did not exhibit sympathy and empathy when a friend was the comparison person and, if anything, showed a slight trend in the opposite direction.

How should these findings be construed? The situations described in this and related studies pose a conflict of interests for the members of the "competing" dyad. The supe-

rior performer wants to relish in his or her performance but does so at the expense of the inferior performer's feelings of self-worth. When the competitors are friends, the research implications are clear: The feelings of the inferior performer are either forsaken or neglected altogether. In other words, people still feel rather pleasant when they outperform a friend, and strive to do so, despite the possible negative repercussions. They also respond quite negatively when the friend is the outperformer.

When the competitors are relationship partners, a different story unfolds. Low-avoidance individuals are not so quick to bask in the glow of a superior performance if the success is at the expense of a romantic partner, and when their partner does well, the sting of being outperformed is lessened. We have explained these effects in terms of two factors. The first is a "construal" factor—because one has a positive model of the romantic partner, he or she concedes the benefits of a superior performance and endures the pains of an inferior performance. The second is an "identity" factor in which the overlap between one's concept of self and other causes a success or a failure for the partner seem like a success or failure for the self. The construal factor stems from existing research on the nature of attachment, and tangential support for the identity factor is evident in our own data. The correlation between avoidance and IOS, a measure of self-other overlap, was significant and negative ($r = -.539, p < .001$), indicating that as avoidance increased, reported overlap with partner decreased. This correlation was not significant for anxiety ($r = .199, p = .167$). So far, we have referred to these factors as having an additive effect, that is, the construal and identity factors conspire to produce the observed sympathy and empathy effects. A more sophisticated account is that construal is a more appropriate explanation for deliberate, controlled responses to performance situations, while the identity factor is more appropriate for relatively automatic responses (see Bargh, 1994). We are unable to address this question with the present data, but the possibility is amenable to future investigation.

Consistent with our predictions, it was clear that the effects of sympathy and empathy were

absent in domains of low importance to the partner. Low-avoidance individuals only appeared to adjust their responses when their partners had something at stake. However, the expected interaction of sympathy and importance was not significant in Study 2 and was only marginally significant for empathy and the positive dependent variable in Study 2. It is possible that in an imagined scenario, partner importance has less of an impact than it would in a real performance comparison between the couple, particularly when the partner's positive and negative reactions would be visible to the subject. This type of design is certainly a goal of future research in this area.

Limitations

Perhaps the most obvious potential limitation of the present research is the susceptibility of the design to socially desirable responses. Both Studies 1 and 2 consisted entirely of self-report-dependent measures. Without the convergent evidence of unobtrusive or behavioral measures, it is possible that participants responded according to how they thought they should respond. This is a legitimate concern, but there are two reasons why we believe that it does not pose a serious threat to the validity of our findings. First, our self-report paradigm is patterned closely after the paradigm validated in several published studies on comparative processes (e.g., Beach et al., 1998; Exline & Lobel, 2001; Mendolia, Beach, & Tesser, 1996). Second, although participants might realize that they should report feeling worse when outperforming their partners and better while being outperformed, it is not so clear why social desirability would influence responses according to attachment. Indeed, for social desirability to have produced our interactions of avoidance and competitive outcomes, it not only would mean that people low in avoidance give more socially desirable responses than those high in avoidance, but also that anxiety is for some reason unaffected by social desirability. This rather dubious premise is not supported by the attachment literature. If anything, because it is associated with a desire to please others, anxiety should be more closely tied to social desirability than

avoidance.⁴ Moreover, even if the participants' responses were guided not by how they would feel in a real situation but by how they think they ought to feel, the results still have merit. The greater relationship experience typically enjoyed by securely attached individuals may be related to their beliefs that they should feel bad when they outperform their partners and feel good—relatively speaking—when their partners outperforms them. In fact, how individuals think they ought to feel in performance comparisons involving their partners may be more important in guiding their behavior than their immediate response to a superior or inferior performance. Nonetheless, the onus on future research is to look at actual interactions (e.g., Tesser & Smith, 1980)—not because we doubt the validity of the self-report results but because bona fide interactions would allow us to examine the process from the perspective of *both* partners in the relationship. This research is the first step in establishing the role of attachment in performance comparisons, and we believe it succeeds in that respect.

Study 2 consisted predominantly of women. It would seem that this might pose a problem for the generalizability of our results, but the results of Study 1 appear to suggest otherwise. In Study 1, we found no significant differences between men and women for the key analyses. Given that the findings of Study 1 largely mirrored those of Study 2, we believe that the findings hold for men as well as for women. Naturally, future studies should attempt to achieve a greater gender balance.

Conclusion

One of the more attractive aspects of the attachment literature is the sheer breadth of the findings. Attachment orientations have been tied to a diverse array of outcomes and behaviors ranging from relationship satisfaction (J. A. Feeney, 2002) to physical and mental well-being (Moore & Leung, 2002). To our knowledge,

4. The Bartholomew & Horowitz (1991) four-prototype scale used in Study 1 has been found to be particularly resistant to socially desirable or self-deceptive responses (Leak & Parsons, 2001).

no research has investigated the role of attachment in performance comparisons such as those described by the SEM model and the social comparison literature. As Tesser and his colleagues have argued (Beach et al., 1998; Pilkington et al., 1991), there is reason to believe that comparison processes have important implications for relationship quality. The present studies indicate that we can better understand these implications when attachment dimensions are taken into account.

References

- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, *63*, 596–612.
- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. S. Wyer & T. K. Srull (Eds.), *Handbook of social cognition* (pp. 1–40). Hillsdale, NJ: Erlbaum.
- Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*, 226–244.
- Beach, S. R. H., Tesser, A., Fincham, F. D., Jones, D. J., Johnson, D., & Whitaker, D. J. (1998). Pleasure and pain in doing well, together: An investigation of performance-related affect in close relationships. *Journal of Personality and Social Psychology*, *74*, 923–938.
- Bowlby, J. (1969/1982). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- 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.
- Brickman, P., & Bulman, R. J. (1977). Pleasure and pain in social comparison. In J. M. Suls & R. L. Miller (Eds.), *Social comparison processes: Theoretical and empirical perspectives* (pp. 149–186). Washington, DC: Hemisphere.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support-seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, *78*, 1053–1073.
- Davila, J., Burge, D., & Hammen, C. (1997). Why does attachment style change? *Journal of Personality and Social Psychology*, *73*, 826–838.
- Dias, L., & Lobel, M. (1997). Social comparison in medically high risk pregnant women. *Journal of Applied Social Psychology*, *27*, 1629–1649.
- Exline, J. J., & Lobel, M. (1999). The perils of outperformance: Sensitivity about being the target of a threatening upward comparison. *Psychological Bulletin*, *125*, 307–337.
- Exline, J. J., & Lobel, M. (2001). Private gain, social strain: Do relationship factors shape responses to out-performance? *European Journal of Social Psychology*, *31*, 593–607.
- Feeney, J. A. (2002). Attachment, marital interaction, and relationship satisfaction: A diary study. *Personal Relationships*, *9*, 39–55.
- Feeney, B. C., & Collins, N. L. (2001). Predictors of caregiving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology*, *80*, 972–994.
- Gilbert, D. T., Giesler, R. B., & Morris, K. A. (1995). When comparisons arise. *Journal of Personality and Social Psychology*, *69*, 227–236.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*, 511–524.
- Hazan, C., & Shaver, P. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, *5*, 1–22.
- Hegelson, V. S., & Mickelson, K. D. (1995). Motives for social comparison. *Personality and Social Psychology Bulletin*, *21*, 1200–1209.
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, *50*, 93–98.
- Kirkpatrick, L. A., & Hazan, C. (1994). Attachment styles and close relationships: A four-year prospective study. *Personal Relationships*, *1*, 123–142.
- Leak, G. K., & Parsons, C. J. (2001). The susceptibility of three attachment style measures to socially desirable responding. *Social Behavior and Personality*, *29*, 21–30.
- Locke, K. D., & Nekich, J. C. (2000). Agency and communion in social comparison. *Personality and Social Psychology Bulletin*, *26*, 864–874.
- McFarland, C., Buehler, R., & McKay, L. (2001). Affective responses to social comparisons with extremely close others. *Social Cognition*, *19*, 547–586.
- Mendolia, M., Beach, S. R. H., & Tesser, A. (1996). The relationship between marital interaction behaviors and affective reactions to one's own and one's spouse's self-evaluation needs. *Personal Relationships*, *3*, 279–292.
- Moore, S., & Leung, C. (2002). Young people's romantic attachment styles and their associations with well-being. *Journal of Adolescence*, *25*, 243–255.
- Paludi, M. A., & Frankell-Hauser, J. (1986). An idiographic approach to the study of women's achievement striving. *Psychology of Women Quarterly*, *10*, 89–100.
- Pilkington, C. J., Tesser, A., & Stevens, D. (1991). Complementarity in romantic relationships: A self-evaluation maintenance perspective. *Journal of Social and Personal Relationships*, *8*, 481–504.
- Salovey, P., & Rodin, J. (1984). Some antecedents and consequences of social-comparison jealousy. *Journal of Personality and Social Psychology*, *47*, 780–792.
- Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns. *Personal Relationships*, *1*, 23–43.
- Sprecher, S. (1999). I love you more today than yesterday: Romantic partners' perceptions of changes in love and related affect over time. *Journal of Personality and Social Psychology*, *76*, 46–53.
- Taylor, S. E., & Armor, D. A. (1996). Positive illusions and coping with adversity. *Journal of Personality*, *64*, 873–898.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in experimental psychology*. Vol. 21 (pp. 181–227). New York: Academic Press.
- Tesser, A., & Campbell, J. (1980). Self-definition: The impact of the relative performance and similarity of others. *Social Psychology Quarterly*, *43*, 341–347.

- Tesser, A., & Campbell, J. L. (1982). Self-evaluation maintenance and the perception of friends and strangers. *Journal of Personality, 50*, 261–279.
- Tesser, A., & Cornell, D. P. (1991). On the confluence of self processes. *Journal of Experimental Social Psychology, 27*, 501–526.
- Tesser, A., & Smith, J. (1980). Some effects of friendship and task importance on helping: You don't always help the one you like. *Journal of Experimental Social Psychology, 16*, 582–590.
- Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychology Bulletin, 90*, 245–271.