

See discussions, stats, and author profiles for this publication at: <http://www.researchgate.net/publication/23422012>

For Better and for Worse: Everyday Social Comparisons Between Romantic Partners

ARTICLE *in* JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY · DECEMBER 2008

Impact Factor: 5.08 · DOI: 10.1037/0022-3514.95.5.1180 · Source: PubMed

CITATIONS

19

READS

72

4 AUTHORS, INCLUDING:



[Rebecca T Pinkus](#)

Western Sydney University

16 PUBLICATIONS 212 CITATIONS

[SEE PROFILE](#)



[Ulrich Schimmack](#)

University of Toronto

67 PUBLICATIONS 2,540 CITATIONS

[SEE PROFILE](#)

For Better and for Worse: Everyday Social Comparisons Between Romantic Partners

Rebecca T. Pinkus and Penelope Lockwood
University of Toronto

Ulrich Schimmack
University of Toronto Mississauga

Marc A. Fournier
University of Toronto Scarborough

The authors examined the frequency, direction, and impact of social comparisons between romantic partners. Comparisons were expected to occur on a daily basis, owing to regular interactions between partners. To the extent that one empathizes and shares outcomes with one's partner, one might respond more positively to upward than to downward comparisons. Study 1a was an experience-sampling study in which participants reported comparisons made to their spouse over 2 weeks. Study 1b examined reactions to the most significant comparisons made during the experience-sampling study. Participants reported making comparisons to their romantic partner more than once a day on average and experienced more positive responses to upward than to downward comparisons. Study 2 demonstrated that participants empathized and shared outcomes with their partner to a greater extent than with a friend. Study 3 confirmed that participants responded more positively to upward than to downward comparisons even for domains high in self-relevance and even when the comparison had negative self-evaluative implications. These results suggest that, owing to higher levels of empathy and shared fate with partners, comparisons function differently in romantic than in other relationships.

Keywords: social comparison, romantic relationships, couples, self-evaluation, affective responses

In the 1937 classic film *A Star Is Born*, actor Norman Maine shepherds the budding star Vicki Lester to Hollywood fame; they fall in love and marry along the way (Selznick & Wellman, 1937). As Lester's fame grows, however, Maine's own career flounders. Although he is proud of her achievements, her skyrocketing suc-

cess starts to throw his own continuing failures into sharp relief. After a painful period of drinking and depression, he ultimately commits suicide. This immensely popular film, remade twice, clearly touched a chord with audiences, suggesting that individuals resonated to the central theme of the distress that arises when one partner outperforms the other.

A long tradition of research suggests that Maine's ongoing comparisons to his wife would indeed have had the potential to damage his self-esteem. Upward comparisons, comparisons to a more successful other, can threaten self-evaluations (Major, Testa, & Bylsma, 1991; Morse & Gergen, 1970; for a review, see Wood, 1989) and lead to more negative mood (Tesser, Millar, & Moore, 1988; Wheeler & Miyake, 1992). Upward comparisons, moreover, tend to be especially influential in highly close relationships; individuals tend to be more strongly affected by comparisons to close friends than to strangers or acquaintances (Tesser, 1988). Comparisons to a more successful partner, therefore, have the potential to be particularly distressing. Moreover, given that many couples share career, leisure, and family interests, there are likely numerous opportunities for self-relevant comparisons with one's partner. Individuals may become aware that their partner is a more effective parent, a less financially savvy investor, or a better tennis player than they themselves are. In addition, spouses typically spend significant amounts of time together and have intimate knowledge of each other's successes and failures. It therefore seems likely that self-relevant comparisons between spouses happen on a regular basis and have a significant impact on the self.

We propose, however, that spouses may actually respond more positively when their partner outperforms them (an upward com-

Rebecca T. Pinkus and Penelope Lockwood, Department of Psychology, University of Toronto, Toronto, Ontario, Canada; Ulrich Schimmack, Department of Psychology, University of Toronto Mississauga, Mississauga, Ontario, Canada; Marc A. Fournier, Department of Psychology, University of Toronto Scarborough, Toronto, Ontario, Canada.

This research was supported by a Social Sciences and Humanities Research Council of Canada (SSHRC) Doctoral Fellowship to Rebecca T. Pinkus, an SSHRC Research Grant to Penelope Lockwood, and a Connaught Matching Grant and an SSHRC Research Grant to Ulrich Schimmack. Portions of the present research were conducted as part of Rebecca T. Pinkus's doctoral dissertation at the University of Toronto.

We are grateful to Dan Dolderman for his helpful comments on an earlier version of this article, and we thank Deborah Kashy and Sandra Murray for their help and advice with statistical analyses. We thank Marques Bostic, Louisa Budzinski, Christine Cabral, Kristen Carroll, Sarah Kmiec, HeeJoo Lim, HeeSun Lim, Kelly McFadyen, Mike Morrison, Lindsay Newton, Rachele Perez, Jessica Schroeder, and Hyea Min Yoon for their assistance with data collection.

Correspondence concerning this article should be addressed to Rebecca T. Pinkus, who is now at Department of Psychology, Park Hall, University at Buffalo, The State University of New York, Buffalo, NY 14260-4110, or to Penelope Lockwood, Department of Psychology, University of Toronto, 100 St. George Street, Toronto, Ontario, Canada M5S 3G3. E-mail: rt.pinkus@utoronto.ca or lockwood@psych.utoronto.ca

parison) than when they outperform the partner (a downward comparison). When individuals are highly close to a comparison other, they may include the other as part of their own identity (Aron & Aron, 1986; Aron, Aron, Tudor, & Nelson, 1991; Aron, Mashek, & Aron, 2004; Aron et al., 2005), taking on the partner's characteristics and perspectives. To the extent that one takes the partner's perspective, one may empathize with the other and experience the other's successes and failures as one's own. Indeed, in their extended self-evaluation maintenance model, Beach and Tesser (1993) argue that the effects of social comparisons are attenuated in intimate relationships because partners will experience empathy; that is, upward comparisons will be less threatening, and downward comparisons less gratifying, because individuals will take pride in a partner's success and feel sorry for a partner's failures. Consistent with this idea, previous research has identified romantic relationships as a type of communal relationship in which individuals are responsive to one another's needs and demonstrate concern and caring for one another (e.g., Clark & Mills, 1979, 1993; Clark, Ouellette, Powell, & Milberg, 1987). The greater the communal strength of the relationship, the more likely individuals should be to empathize with one another (Mills, Clark, Ford, & Johnson, 2004). Thus, individuals may respond more positively to upward and less positively to downward comparisons to romantic partners than to other individuals (e.g., friends) because they experience greater empathy toward the partner.

Individuals may also respond more positively to upward than to downward comparisons in romantic relationships because they may, to some extent, share their partner's fate: In strongly committed relationships, such as a marriage, individuals share not only the partner's perspective and characteristics but also the partner's resources (Aron & Aron, 1986; Aron et al., 1991, 2004, 2005) and outcomes. When one's partner gets a significant raise at work, one may be aware that one's own salary is less impressive, but any pain from this upward comparison may be offset by the realization that with the additional shared income, one will be able to go on a winter cruise, buy a new car, or move to a nicer home. When one's spouse is a less stellar cook than oneself, one may be able to bask in one's culinary superiority, but one's enjoyment of this downward comparison may be seriously impaired when one is forced to eat suboptimal dinners prepared by the gastronomically challenged partner. Because individuals share outcomes, positive and negative, with their spouse, they may actually respond more positively to upward than to downward comparisons.

Positive responses to upward comparisons, moreover, may serve to maintain satisfaction with the relationship. Past research suggests that individuals are adept at maintaining or even enhancing their relationship in the face of potential threats (Gagné & Lydon, 2001; Lockwood, Dolderman, Sadler, & Gerchak, 2004; Murray, Rose, Bellavia, Holmes, & Kusche, 2002). For example, individuals tend to reframe their partner's faults by turning them into virtues (Murray & Holmes, 1993, 1994, 1999). When their partner behaves badly, individuals make external rather than internal attributions for the behavior (Bradbury & Fincham, 1990) and avoid reacting in a tit-for-tat manner (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). They also downplay both their own attraction to a potential alternative partner (Lydon, Meana, Sepinwall, Richards, & Mayman, 1999) and their partner's attraction to a potential alternative partner (Simpson, Ickes, & Blackstone, 1995). Thus, evidence suggests that individuals are motivated to engage in

strategies aimed at maintaining or protecting their relationship. Whereas upward comparisons to a friend may have the potential to damage the friendship (Pleban & Tesser, 1981; Tesser & Smith, 1980), upward comparisons to a romantic partner may instead prompt individuals to interpret the comparison in ways that protect the relationship. For example, individuals may choose to focus on the benefits of the upward comparison for the partner rather than the self-evaluative costs to themselves. As a result, comparisons to a superior spouse may have positive affective outcomes.

In sum, in contrast to comparisons with friends or strangers, individuals may respond more positively to upward than to downward comparisons with a romantic partner. This may be the case even for domains high in self-relevance because comparisons in the context of a relationship involve conditions not present in other social comparisons. Because individuals may experience their partner's identity as overlapping with their own, they may empathize with their partner, feeling sad for a partner who does poorly and happy for a partner who does well. In addition, they may share their partner's fate in practical ways: Because they share resources with the partner, they may expect to benefit from having a highly successful partner and to lose out when their partner is unsuccessful. Rather than experiencing upward comparisons as threatening to the self, individuals may instead focus on the benefits to the partner and the relationship, and consequently may find comparisons to a superior partner to be rewarding.

A number of laboratory studies provide evidence that individuals respond differently to comparisons with close partners than they do to comparisons with friends or strangers, noting that upward comparisons in particular appear to be less threatening in the context of a romantic relationship. For example, Beach and his colleagues found that individuals were less negatively affected by recalled upward comparisons to a spouse, particularly when the domain was important to the spouse (Beach et al., 1998). Similarly, individuals in close "identity" relationships, in which they viewed their identity as overlapping with another person, were more positively affected by upward comparisons than were those in relationships without this identity overlap (McFarland, Buehler, & MacKay, 2001). In another study, participants were given feedback that they had outperformed or been outperformed by their relationship partner on an intelligence test (Lockwood et al., 2004); participants higher in closeness viewed themselves more positively on relationship-related attributes following an upward comparison than did those lower in closeness. They appeared to use their relationship as a self-affirming buffer against potential comparison threats. Taken together, these studies suggest that upward comparisons may be less distressing in the context of a romantic relationship than in other relationships.

In the present research, we sought to show that individuals respond more positively to upward than to downward comparisons in relationships and to evaluate possible explanations for this anticipated finding. We first examined daily comparisons between partners in an experience-sampling study, in which individuals reported on the comparisons they made to their spouse over a 2-week period (Study 1a). We next sought evidence to explain why individuals in relationships might respond more positively to upward than to downward comparisons. Participants described the most significant comparisons that they made during the 2-week experience-sampling study; we assessed the degree to which empathy and shared outcomes were associated with these comparison

responses (Study 1b). We then examined the extent to which empathy and shared fate responses would be stronger for comparisons between romantic partners than for those between friends (Study 2). Finally, we confirmed that individuals would respond more positively to upward than to downward comparisons to their partner even in domains high in self-relevance (Study 3). We also assessed the extent to which a comparison's impact on self-evaluations, partner evaluations, and perceptions of the relationship would contribute to overall affect following the comparison (Study 3).

Study 1a: Daily Social Comparisons Between Spouses

We first conducted an experience-sampling study in which we examined the direction, domain, and outcome of individuals' comparisons to their spouses. We focused on married couples because these individuals had shown the strongest evidence of empathic responses to comparisons in past studies (Beach et al., 1998, 1996). Past studies on naturalistic comparisons (e.g., Locke, 2003; Wheeler & Miyake, 1992) found that individuals reported more positive changes in affect following downward than upward comparisons; when comparing themselves to friends and acquaintances, participants felt better when they outperformed than when they were outperformed by the other. In contrast, in the present study, we expected that participants would feel better following upward than downward comparisons.

We also examined the frequency of upward relative to downward comparisons. Whereas past studies (Locke & Nekich, 2000; Olson & Evans, 1999; Wheeler & Miyake, 1992) have found evidence of more frequent downward than upward comparisons, we expected this discrepancy to be reduced or even reversed in the present study. Because upward comparisons to romantic partners are expected to be experienced positively, they may also be more frequent. Individuals may have less need to shy away from information that may reveal a partner's superiorities, given that they will have the opportunity to share in the partner's successes. Moreover, comparisons to a less successful partner are potentially distressing; thus, individuals may be less motivated to identify instances of a partner's inferiority.

Finally, we used this study to examine a possible predictor of comparison outcomes in married couples. Closeness, or the extent to which individuals include their partner as part of their own identity, has been examined as a predictor in past laboratory studies examining comparison outcomes, with individuals higher in relationship closeness generally showing more positive reactions to upward comparisons than those lower in closeness (Lockwood et al., 2004; McFarland et al., 2001). We predicted that higher closeness would be associated with especially positive reactions to upward relative to downward comparisons, given that highly close participants would be most likely to empathize with and view themselves as sharing the fate of the partner.

Method

Participants

Participants were 99 couples who responded to an advertisement placed in a commuter newspaper; couples were invited to take part in a study about daily activities in couples. Two couples did not

complete the study and so were not included in the analyses. In addition, two individuals did not report making any comparisons to their spouse over 2 weeks; data from both of these couples were excluded from the analyses. The final sample consisted of 95 couples. Participants were each paid \$75 CAD for taking part in the study. Participants were required to provide proof of their marriage status (e.g., a marriage certificate) upon their arrival at the lab.

On average, husbands were 40.4 years old ($SD = 12.4$) and wives were 37.6 years old ($SD = 11.3$). Couples had been married for an average of 10.0 years ($SD = 10.1$), and the mean number of children living in the home was 0.9 ($SD = 1.1$). Our sample was highly educated: 82% of husbands and 81% of wives had completed college or postgraduate education; all participants had completed at least a high school education. The average household income was \$63,000 CAD. All participants were residents of Toronto.

Procedure

Participants first came to the lab for a 2-hr intake session. During this session, they completed a measure of closeness (Lockwood et al., 2004). Participants were asked to rate themselves on 19 items tapping the extent to which they viewed their partner's identity as overlapping with their own (e.g., "My identity and my partner's identity overlap a great deal," "I tend to think of my partner and I as a unit, not as two separate individuals"). Ratings were made on a 7-point scale with endpoints labeled 1 (*strongly disagree*) and 7 (*strongly agree*). Participants also completed several other measures unrelated to the present study.

Next, the experimenter provided a brief tutorial explaining what social comparisons are, giving examples, and noting that comparisons are not inherently "bad" or "good" for a relationship. At this time, participants were asked to provide a written example of a comparison, so that the experimenter could confirm that they did indeed understand the task. Participants were then trained in the use of a personal digital assistant (PDA) handheld computer on which they would record their daily comparisons.

Immediately following the intake session, participants took the PDAs home for a 2-week period. Each day during this time, the PDA alarm sounded six times, prompting participants to record any comparison experiences since the last alarm. Alarms sounded at intervals of approximately 2–3 hr, with some idiosyncratic variation; for example, daily start and stop times were set by the experimenter individually for each participant to ensure that he or she was likely to be awake for each alarm. Alarms continued to beep at 10-min intervals until participants responded.

Following each alarm, PDAs prompted participants to respond to a series of questions. Participants were first asked to indicate how many times they had compared themselves to their partner since the preceding alarm on a scale with the following options: 0 (*never*), 1 (*once*), 2 (*twice*), 3 (*3 times*), 4 (*4 times*), 5 (*5 times*), 6 (*more than 5 times*). They then responded to a set of questions regarding their most recent comparison. They first indicated the direction of the comparison (partner superior/more successful, self and partner about the same, or self superior/more successful). They next indicated the domain in which they had made the comparison, selecting from among seven options: abilities/skills/knowledge, social/interpersonal skills, physical appearance, child-care/

housework-related, career/work-related, general traits/attributes, or other.

To ensure that participants understood the domain labels, a full list of these domains with definitions was provided to each participant during the intake training session. In brief, the definitions were as follows: The abilities/skills/knowledge domain was defined as including abilities in sports, music, art, and so forth, but did not include social skills. The social/interpersonal skills domain was defined as including abilities and attributes with respect to interacting with and relating to other people. The physical appearance domain was defined as including anything about how one looks (e.g., clothes, physical features, body type). The child-care/housework-related domain was defined as including comparisons having to do with one's family and home (e.g., housework, chores, or interactions that specifically involve children or other family members). The career/work-related domain was defined as including anything to do with one's work outside the home. The general traits/attributes category was defined as including perceptions of oneself and one's partner on more general, abstract traits. After indicating the comparison domain, participants indicated their affective reaction to the comparison; they indicated first the extent to which the comparison had made them "feel good" on a scale ranging from 0 (*no*) to 6 (*yes, maximum*) and then the extent to which the comparison had made them "feel bad" on a scale ranging from 0 (*no*) to 6 (*yes, maximum*).

Time printing on the PDAs enabled us to confirm that participants were indeed recording their comparison experiences following the alarms. Participants were contacted by a research assistant at the 7-day point to confirm that they were not experiencing any technical difficulties using the PDAs.

At the end of the 2-week period, participants returned to the lab for an exit session. At this time they returned the PDAs and completed a questionnaire regarding their most significant comparisons, as is discussed in Study 1b.

Results

Intake Questionnaire

Relationship closeness items were averaged to form a single index of relationship closeness (Cronbach's $\alpha = .85$ overall, $\alpha = .82$ for husbands, $\alpha = .87$ for wives). The average closeness score was 4.91 ($SD = 0.90$), and husbands' closeness scores ($M = 4.99$, $SD = 0.80$) were not significantly different from wives' closeness scores ($M = 4.83$, $SD = 0.99$), $t(94) = -1.60$, $p = .11$. Husbands' and wives' closeness scores were positively correlated ($r = .45$, $p < .001$). Gender was examined as a variable in all analyses, but there were no gender effects. Therefore, the analyses reported below exclude gender, and gender is not discussed further.

Frequency Data

Overall frequency of comparison. Participants reported making 1.85 comparisons per day ($SD = 1.92$),¹ which is similar to the daily number of comparisons that participants in past studies reported making to all other individuals combined ($M = 1.41$, Locke, 2003; $M = 1.89$, Locke & Nekich, 2000; $M = 1.79$, Wheeler & Miyake, 1992).

Direction of most recent comparison. We next examined the direction of participants' most recent comparison, that is, the

comparison they had made most recently since their last PDA entry ($M = 1.41$ per day). Forty-one percent of these comparisons were upward (i.e., partner superior), 27% were lateral (i.e., self and partner performed the same), and 32% were downward (i.e., self superior). Given that our focus was on evaluative comparisons (i.e., upward and downward comparisons), lateral comparisons were excluded from all remaining analyses.² The data were nested in structure: Multiple observations (Level 1: comparisons) were nested within participants (Level 2: individuals), who were nested within dyads (Level 3: couples). Because of this nested nature of the data, we used hierarchical generalized linear models with log-odds ratios to analyze the frequency data (Raudenbush & Bryk, 2002). The models were computed using the software package HLM 6.02 (Raudenbush, Bryk, & Congdon, 2005). To test whether there were relative differences in the frequency of making upward and downward comparisons, we coded the multinomial outcome variable (comparison direction) as follows: 0 = downward comparisons (DC) and 1 = upward comparisons (UC). In brief, our data analytic strategy was to compute the likelihood of making an upward relative to a downward comparison, taking into account both individual-level differences and couple-level differences in the frequency of making comparisons.

The Level 1 (comparison level) model was

$$\text{Log} [\text{probability UC/probability DC}] = \pi_{0ij}.$$

In this equation, the π_{0ij} coefficient represents the log-odds of making an upward comparison relative to a downward comparison for individual i in couple j . The Level 2 equation models the Level 1 coefficients as outcomes at the individual level. The Level 2 model was

$$\pi_{0ij} = \beta_{00} + r_{0ij}.$$

The equation specifies that the intercept of the log-odds of making an upward relative to a downward comparison for individual i in couple j is a function of a grand mean intercept across all individuals, β_{00} , and that the intercept varies randomly across individuals, r_{0ij} . The Level 3 equation models the Level 2 intercept as an outcome at the couple level. The Level 3 model was

$$\beta_{00} = \gamma_{000} + \mu_{00}.$$

¹ Participants who selected the "more than 5 times" option on the frequency response scale were coded as having made six comparisons since the last PDA alarm. We note that this number may therefore underestimate the mean number of comparisons per participant. However, given that only 1.6% of the responses to the frequency item indicated that more than five comparisons had been made, this underestimation in the overall frequency of comparison to the partner is likely very small.

² Lateral comparisons may be experienced as "horizontal" rather than "vertical" comparisons, emphasizing what the self and other share in common rather than the extent to which they differ on a "better or worse" status dimension (Locke, 2003). Because lateral comparisons emphasize similarity and connection to the partner, they may be experienced in a way that differs qualitatively from upward and downward comparisons. Indeed, it is not clear that they are experienced as evaluative comparisons per se and may instead be perceived simply as instances of shared similarities between partners. In focusing on upward and downward comparisons, we are using a strategy consistent with that followed by a number of other social comparison researchers (e.g., Olson & Evans, 1999; Wood, Michela, & Giordano, 2000).

The equation specifies the intercept of the log-odds of making an upward relative to a downward comparison as a function of an average intercept across all dyads, γ_{000} , and that the intercept varies randomly across dyads, μ_{00} . The simplified reduced-form equation that combined all three levels of analysis simultaneously was

$$\eta = \gamma_{000} + r_{0ij} + \mu_{00}$$

Participants were more likely to make upward than downward comparisons, but this trend did not reach significance ($\gamma_{000} = 0.18, SE = .11, p = .11$). Closeness was entered as a Level 2 predictor variable and was positively associated with making more upward relative to downward comparisons ($\gamma_{010} = 0.32, SE = .10, p = .002$). Thus, highly close individuals were more likely to make upward relative to downward comparisons than were lower closeness individuals.

Domain of most recent comparison. As can be seen in Table 1, comparisons in domains such as abilities/skills/knowledge, child-care/housework, social/interpersonal skills, and general traits were relatively common, whereas comparisons in the domain of physical appearance were relatively uncommon. Participants were more likely to make upward than downward comparisons in the domains of abilities/skills/knowledge ($\gamma_{000} = 0.54, SE = .18, p = .004$) and physical appearance ($\gamma_{000} = 0.65, SE = .23, p = .007$) and were marginally more likely to make upward than downward comparisons in the domain of social/interpersonal skills ($\gamma_{000} = 0.26, SE = .15, p = .08$). Participants were not significantly more likely to make upward than downward comparisons in the domains of child-care/housework ($\gamma_{000} = -0.002, SE = .16, p = .99$), career ($\gamma_{000} = 0.03, SE = .18, p = .87$), or general traits ($\gamma_{000} = -0.23, SE = .17, p = .19$). Downward comparisons were not more prevalent than upward comparisons in any of the domains.

Comparison Outcomes

We next examined participants' affective responses to the comparisons that they made. We created an overall affect index by subtracting negative ratings from positive ratings. The data were again analyzed using multilevel modeling (see Kenny, Kashy, & Cook, 2006; Nezlek, 2001; Raudenbush & Bryk, 2002; Snijders & Bosker, 1999) owing to the nested structure of the data, in order to model the variance at all three levels simultaneously. In brief, our data analytic strategy was to predict overall affect as a function of comparison direction (for example) and individual-level and couple-level differences in overall affect. We outline our data

analytic strategy below, using a series of prototype equations to test our hypotheses.

Comparison direction. To test whether comparison direction predicted overall affect, we first needed to specify models for each level of analysis. The Level 1 (comparison level) equation included a dummy-coded variable (0 = absent, 1 = present) for upward comparisons, so that downward comparisons were the reference category. The Level 1 model was

$$Y_{ijk} = \pi_{0ij} + \pi_{1ij}UC_{ijk} + e_{ijk}$$

where Y_{ijk} is the overall affect for individual i in couple j after comparison k . In this equation, UC_{ijk} is the dummy-coded predictor variable for upward comparisons for individual i at comparison k , and e_{ijk} is the residual affect for individual i in couple j after comparison k . The π_{0ij} coefficient represents the regression intercept, and in this case, it is individual i in couple j 's average overall affect following downward comparisons (the reference category); π_{1ij} represents the coefficient for the relation between upward comparisons and overall affect for individual i .

The Level 2 equations model the intercept and slope from the Level 1 model as outcome variables at the individual level. The Level 2 model was

$$\pi_{0ij} = \beta_{00} + r_{0ij}$$

$$\pi_{1ij} = \beta_{10} + r_{1ij}$$

The first equation specifies that the intercept for individual i in couple j is a function of a grand mean intercept across all individuals, β_{00} ; in this case, it is the mean overall affect across all participants following downward comparisons (the reference category), and r_{0ij} is the residual for individual i in couple j . The second equation specifies that the slope from the Level 1 model is a function of a grand mean coefficient and a residual. In particular, β_{10} is the mean upward comparison–overall affect slope across all participants, and r_{1ij} is the residual component of that slope for individual i in couple j .

The Level 3 equations model the intercept and slope from the Level 2 model as outcome variables at the couple level. The Level 3 model was

$$\beta_{00} = \gamma_{000} + \mu_{00j}$$

$$\beta_{10} = \gamma_{100}$$

The first equation specifies the intercept as a function of an average intercept across all dyads, γ_{000} , and a residual component

Table 1
Percentage of Comparisons by Direction and Domain (Study 1a)

Direction	Domain							
	Abilities/skills	Social/interpersonal skills	Physical appearance	Child-care/housework	Career	General traits	Other	Total
UC	15.0	8.8	4.4	11.4	6.7	7.1	3.2	56.6
DC	8.4	6.7	2.2	9.4	5.9	8.8	2.1	43.4
Total	23.5	15.4	6.6	20.8	12.6	15.8	5.2	100.0

Note. UC = upward comparison; DC = downward comparison.

Table 2
Means (and Standard Deviations) of Overall Affect in Response to Comparisons by Direction and Domain (Study 1a)

Direction	Domain							
	Abilities/skills	Social/interpersonal skills	Physical appearance	Child-care/housework	Career	General traits	Other	Total
UC	1.56 (1.73)	1.04 (1.93)	0.94 (2.05)	0.88 (1.85)	0.47 (2.31)	0.83 (2.18)	0.54 (1.83)	0.76 (1.78)
DC	0.95 (1.92)	0.78 (1.91)	0.54 (2.22)	0.44 (1.82)	0.68 (2.25)	0.20 (1.91)	0.69 (2.01)	0.49 (1.77)
Total	1.34 (1.73)	0.95 (1.77)	0.75 (2.09)	0.59 (1.83)	0.51 (2.26)	0.49 (1.97)	0.66 (1.78)	0.60 (1.71)

Note. Affect = positive affect rating minus negative affect rating; UC = upward comparison; DC = downward comparison.

for couple j , u_{00j} . The residual component is included only for the intercept, and the other effect is constrained to be equal across dyads (see Kenny et al., 2006). The simplified reduced-form equation that combined all three levels of analysis simultaneously was

$$Y_{ijk} = \gamma_{000} + \gamma_{100} * UC + r_{0ij} + r_{1ij} * UC + \mu_{00j} + e_{ijk}.$$

This equation shows that overall affect at a particular time for a given individual was predicted from an intercept that actually represented the downward comparison–overall affect slope (due to the dummy coding), the upward comparison–overall affect slope, and the four random residual components specified throughout the models for each level.³

The model yielded significant coefficients for both fixed effects ($\gamma_{000} = 0.42$, $SE = .14$, $p = .005$; $\gamma_{100} = 0.39$, $SE = .14$, $p = .008$). These values were substituted into the reduced-form equation to derive the average overall affective response to each direction of comparison. As predicted, participants felt significantly better after upward ($\gamma = 0.81$) than after downward comparisons ($\gamma = 0.42$). The pattern of results remained the same when separate dependent variables for positive affect and negative affect were used. Upward comparisons ($\gamma = 2.59$) were associated with significantly more positive affect than downward comparisons ($\gamma = 2.42$), $\gamma_{100} = 0.17$, $SE = .09$, $p = .05$. Downward comparisons ($\gamma = 2.01$) were associated with significantly more negative affect than upward comparisons ($\gamma = 1.78$), $\gamma_{100} = -0.23$, $SE = .08$, $p = .004$.

Comparison domain. Affective reactions to comparisons for each domain are reported in Table 2. Participants felt better following upward than downward comparisons in the abilities/skills/knowledge domain ($\gamma_{100} = 0.59$, $SE = .22$, $p = .01$) and in the general traits/attributes domain ($\gamma_{100} = 0.90$, $SE = .29$, $p = .003$), and there was a marginal difference in the child-care/housework-related domain, such that upward comparisons tended to be experienced more positively than downward comparisons ($\gamma_{100} = 0.46$, $SE = .24$, $p = .06$). The difference in affective reactions between upward and downward comparisons for the other three domains (social/interpersonal skills, physical appearance, career/work-related) did not reach significance (all $ps > .36$). In no domain did participants report a significantly more positive reaction to downward than to upward comparisons. The pattern of results remained the same when separate positive and negative affect dependent variables were used.

Relationship closeness. We next examined whether comparison direction would interact with participants' level of closeness in determining affective reactions. The main effect of closeness was

significant ($\gamma_{010} = 0.26$, $SE = .10$, $p = .01$); participants who were higher in closeness felt better after comparisons than did those lower in closeness. To test the closeness by comparison direction interaction, we compared the fit of an unconstrained model that allowed for interactions of the comparison directions with closeness to a constrained model in which all the interaction terms were constrained to be equal. Thus, the constrained model allowed for a main effect of closeness but no interactions. The test of the difference in deviances between the two models was not significant, $\chi^2(1) = 0.82$, $p > .500$, indicating that the unconstrained model did not provide a better fit. Therefore, the closeness by comparison direction interaction was not significant.

Discussion

The results of Study 1a provide key evidence regarding the frequency, direction, and impact of the comparisons that individuals make to their spouses in daily life. Participants made 1.85 comparisons per day on average. Thus, the frequency of comparisons to spouses appears similar to the frequency of comparisons to individuals in general as found in past studies (e.g., Locke & Nekich, 2000; Wheeler & Miyake, 1992). We note that other experience-sampling studies have employed an event-contingent rather than a signal-contingent methodology; thus, our results are not directly comparable. Nevertheless, the present study is the first to show that social comparisons between partners occur at least on a daily basis.

Participants did not differ significantly in the frequency of upward and downward comparisons. Past studies on naturalistic comparisons have found greater frequency of downward than upward comparisons (Locke & Nekich, 2000; Wheeler & Miyake, 1992). However, these studies focused on comparisons to friends and acquaintances rather than romantic partners. Because upward comparisons to partners are not experienced as painful, individuals may have less need to avoid them. Alternatively, because downward comparisons to a partner may be a source of stress, individuals may be less likely to seek them out.

³ An alternative approach to modeling the data is to treat time of measurement as crossed with person, rather than nested within person; this approach is appropriate when individuals have been sampled at the same times (Kenny et al., 2006). When analyzing the data in this manner using the software program MLwiN (Rasbash, Browne, Healy, Cameron, & Charlton, 2005; Rasbash, Steele, Browne, & Prosser, 2005), we obtained the identical pattern of significant results.

The results of Study 1a revealed that participants made comparisons across a variety of domains and were especially likely to report making comparisons in the domains of abilities/skills/knowledge, domestic work, general traits, and social/interpersonal skills. In an interdependent relationship in which spouses work together to bring about desired outcomes, it makes sense that individuals would often compare their relative contributions in these domains. Comparisons in the physical appearance domain were the least frequent. It is possible that same-sex comparisons are more relevant in this domain; that is, men tend to make physical appearance comparisons to other men, whereas women tend to make physical appearance comparisons to other women. Indeed, past research on naturalistic appearance-based social comparisons in women found that the majority of these comparisons were to other women (Patrick, Neighbors, & Knee, 2004). Although participants reported more positive affective responses for upward than for downward comparisons for the majority of the domains, not all reached significance, possibly owing to the lower power in the individual domain analyses.

The findings supported our key prediction that individuals would respond more positively when their partner outperformed them than when they outperformed the partner. Past experience-sampling studies have found that individuals typically report more positive reactions to downward than to upward comparisons (e.g., Locke, 2003; Wheeler & Miyake, 1992). These past studies, however, have examined all comparisons made on a daily basis, including comparisons to friends, acquaintances, strangers, and family members. The present research suggests that comparisons between spouses function differently from comparisons between friends or acquaintances: We found that individuals actually reported that upward comparisons to partners were more pleasant than were downward comparisons.

Higher relationship closeness was associated with more frequent upward relative to downward comparisons. It may be that individuals are more comfortable seeking out information about the partner's success when they view that partner's identity to overlap with their own to a high degree. Alternatively, individuals who are highly close may in fact view their partner as more superior to themselves than do individuals lower in closeness, and so may take note of more instances of upward comparisons. Higher relationship satisfaction is associated with a stronger tendency to idealize the partner (Murray, Holmes, & Griffin, 1996); it may be that individuals who feel closer to their partner are also especially likely to focus on or embellish their partner's strengths.

Contrary to our predictions, closeness did not moderate the impact of comparison direction on affective responses. Individuals higher in closeness to the partner reported more positive affective responses than did those lower in closeness regardless of whether the comparison was upward or downward. Thus, it may be that individuals higher in closeness are adept at positively construing the effects of both upward and downward comparisons to their partner. Higher closeness individuals may be especially likely to empathize with the successful partner and to perceive themselves as benefiting from the partner's achievements. Moreover, to the extent that higher closeness individuals also empathize strongly with a less successful partner, they may view the comparison as an opportunity to maintain or even enhance intimacy with the partner by offering comfort and support. Past evidence suggests that individuals high in relationship satisfaction are especially likely to

use strategies aimed at maintaining or boosting the quality of their relationship (e.g., Bradbury & Fincham, 1990; Rusbult et al., 1991). Similarly, it may be that individuals high in closeness use both upward and downward comparisons as strategic opportunities to strengthen their relationship.

Study 1b: Most Significant Intrarelationship Comparisons

The experience-sampling study provides important information regarding the kinds of comparisons individuals make to their spouses on a daily basis and the affective impact of these comparisons. However, these data did not provide any information on the personal importance that participants attached to these comparisons. It is possible, for example, that individuals made numerous upward comparisons that were relatively inconsequential with positive outcomes but one or two very significant upward comparisons with negative outcomes. The mean affect score would suggest an overall positive response to upward comparisons, but this might obscure the possibility that individuals are actually negatively affected by upward comparisons that they view to be more personally significant. Accordingly, during the exit interview for the experience-sampling study, we asked participants to describe the most significant comparisons that they had made during the previous 2 weeks.

We also used this study to examine more carefully the nature of participants' responses to comparisons. We argued that although upward comparisons might threaten self-evaluations to a greater degree than downward comparisons, individuals would nevertheless experience positive affective responses to these comparisons because of their close connection with the partner; their empathy for the partner and recognition of shared outcomes would outweigh the self-evaluative costs of the comparison. That is, relative to downward comparisons, an upward comparison might have a negative impact on one's perceptions of one's own competence; after all, one is being reminded that one is inferior to another person on some dimension. Nevertheless, one might be boosted by the comparison in affective terms because one shares in and benefits from the partner's success. Thus, one's self-evaluations may be somewhat dampened, but one may simultaneously experience more positive affect owing to one's pleasure in the partner's success. Indeed, taking pride and pleasure in the partner's success may serve a self-affirmational function: By focusing on the positive aspects of one's partner and one's relationship, as well as one's own qualities as a good relationship partner, one may be protected from any self-evaluative threat posed by the comparison (Lockwood et al., 2004). Following downward comparisons, in contrast, one may view oneself somewhat more positively because the comparison highlights one's own competence, but one might nevertheless feel distressed by the partner's poor performance. When comparing to a partner, there may be a disconnection between the impact on self-perceptions and affect. To test this possibility, we asked participants in Study 1b to describe both their self-evaluative and their affective responses to comparisons. We predicted that although individuals might evaluate themselves more negatively after upward than after downward comparisons, they would nevertheless experience more positive affect after upward than after downward comparisons.

In addition, we sought evidence to support our hypotheses regarding participants' affective responses to comparisons. The

experience-sampling study provides evidence that individuals react more positively to upward than to downward comparisons with a partner; however, this study does not provide any information on why this might be the case. Daily PDA questionnaires were of necessity very short. Response options were highly restricted and included quantitative data only. In Study 1b, we sought more detailed information regarding participants' responses to comparisons. Specifically, we examined the possibility that upward comparisons lead to more positive responses than do downward comparisons because individuals both empathize with and share the fate of their partner. After completing the self-evaluation and affect measures, participants were asked to describe their responses to the comparison in open-ended form. We coded responses for self-evaluative contrast effects (feeling worse about self after upward comparisons and better about self after downward comparisons), empathy (feeling happy for partner after upward comparisons and sad for partner after downward comparisons), and shared fate experiences (feeling benefits of a superior partner after upward comparisons or costs associated with an inferior partner after downward comparisons). We expected more empathic and shared fate than contrast responses to comparisons.

Finally, we used this study to examine behavioral outcomes of comparisons. Past research suggests that when individuals are threatened by an upward comparison, they will go to considerable lengths to ease their distress (Tesser, 1988). For example, in one study, participants who made a threatening upward comparison chose to sit further away from the comparison other (Pleban & Tesser, 1981); presumably, by distancing themselves from the other, they sought to avoid further comparisons. In another study, individuals who had performed poorly on a task attempted to sabotage the performance of friends, in order to avoid a threatening upward comparison (Tesser & Smith, 1980). Such distancing and sabotaging strategies would likely undermine relationship closeness or satisfaction, ultimately posing a threat to the relationship. To the extent that upward comparisons are rewarding rather than threatening, however, individuals may feel no need to engage in distancing behaviors when their partner outperforms them. Instead, they may seek greater closeness to share in the partner's positive outcomes. Individuals may engage in distancing behaviors only after downward comparisons, in order to avoid feeling dragged down by the poorly performing partner.

Moreover, rather than sabotaging a superior partner's performance, spouses may seek more constructive ways to close any gaps in performance levels between themselves and their partner: They may try to improve their own performance after an upward comparison, or, following a downward comparison, they may offer assistance or support to the partner to help pull the partner up to their own level. Consistent with this notion, recent research has found that when individuals perceive that their partner does not meet their ideal partner standards, a process akin to a downward comparison, they will attempt to change their partner to bring about a closer match between ideals and perceptions of partner (Overall, Fletcher, & Simpson, 2006). Moreover, partners who are the target of these change attempts infer that they have fallen short of their partner's ideals such that, as with an upward comparison, they are forced to recognize that they have failed to achieve a desired standard; these individuals do indeed try to self-improve in response (Overall et al., 2006). Thus, individuals may attempt to close any gap between their own and their partner's performance by offering help to their partner after a down-

ward comparison and by trying to improve their own performance after an upward comparison.

We predicted that individuals would seek to improve their own performance following an upward comparison, even though we also predicted that individuals would feel better after an upward than after a downward comparison; although upward comparisons may lead to positive affect, individuals may actually be happiest when there is no evaluative comparison at all, as when both partners have similar talents. Individuals may attempt to reestablish equilibrium following an upward or a downward comparison because they are most comfortable when they are on the same level as their partner (cf. Murray et al., 2005), such that there is no possibility that they are dragging down the partner or being dragged down themselves. Individuals tend to be happiest in relationships when they feel that they share similarities, real or imagined, with their partner, which in turn leads to feelings of being understood by the partner (Murray, Holmes, Bellavia, Griffin, & Dolderman, 2002). Thus, even if individuals can take pleasure in the successful performance of their partner, they nevertheless may try to improve their own performance to ensure that they continue to share similarities with their partner.

Method

Participants

Participants were 56 men and 60 women who had taken part in the PDA experience-sampling study (Study 1a).⁴ Participants returned to the lab at the end of the 2-week period to complete an exit questionnaire. The average age of participants was 35.8 years ($SD = 9.16$). All participants had been married for at least 1 year ($M = 7.82$ years, $SD = 7.94$), and the mean number of children living in the home was 0.70 ($SD = 0.95$). The average family income was \$64,000 CAD. All participants had at least a high school education. In addition, 3% of participants had completed some college or university, 66% had completed university, and 22% had completed a graduate or professional degree. As in Study 1a, because our hypotheses focused primarily on differences among participants reporting upward and downward comparisons, we included only those participants who perceived a difference between themselves and their partner and therefore excluded the small number of additional participants ($n = 9$) who reported that their most significant comparison was lateral.

Procedure

As part of the exit session, participants were asked to complete a questionnaire regarding the most significant comparison they had made in the preceding 2 weeks. Participants were first asked to describe this comparison and to indicate the comparison direction and domain. Comparison domain was selected from a list of 13 options: academic/career-related, social skills, interpersonal attributes, personality characteristics (e.g., intelligence, shyness, sense of humor), abilities/talents (e.g., athletics, music, driving abilities), physical appearance, wealth (e.g., money, possessions,

⁴ Data on most significant comparisons were missing for a subset of participants because the most significant comparison measure was not included in their questionnaire package as a result of a photocopying error.

Table 3
Percentage of Most Significant Comparisons by Direction and Domain (Study 1b)

Direction	Domain										Total
	A/C	SS/IA	PC	A/T	PA	W	CA/H	I	OP	OT	
UC	17.4	15.6	6.4	4.6	3.7	0.9	8.3	0.9	0.9	0.0	58.7
DC	11.9	11.0	3.7	1.8	0.9	2.8	7.3	0.0	0.0	1.8	41.3
Total	29.4	26.6	10.1	6.4	4.6	3.7	15.6	0.9	0.9	1.8	100.0

Note. Eight comparisons in which multiple domains were identified are not included. UC = upward comparison; DC = downward comparison; A/C = academic/career-related; SS/IA = social skills/interpersonal attributes; PC = personality characteristics; A/T = abilities/talents; PA = physical appearance; W = wealth; CA/H = child-care abilities/housework; I = intimacy; OP = opinions; OT = other.

salary), child-care abilities, housework, intimacy (e.g., comparisons having to do with one's intimate emotional and physical life with one's romantic partner), recreation, opinions (e.g., comparisons made to one's partner in terms of attitudes or opinions), and other. This list expanded on the rather limited options available using the PDAs in the experience-sampling component.

Participants were then asked to indicate how the comparison affected their self-evaluations. They rated how the comparison made them feel about themselves on a scale ranging from -3 (*made me feel worse about myself than usual*) to 3 (*made me feel better about myself than usual*). They next answered two questions designed to tap their overall affective response to the comparison. They indicated how pleasant the comparison made them feel on a scale ranging from -3 (*very unpleasant*) to 3 (*very pleasant*) and how satisfying the comparison was on a scale ranging from -3 (*very unsatisfying*) to 3 (*very satisfying*).

Finally, participants answered a set of four questions about the comparison in open-ended form. They were asked to indicate how the comparison affected them, how it affected their feelings toward their partner, how it affected their behavior toward their partner, and how it affected their feelings about the relationship.

Results

Frequency Data

Comparison direction and domain. Participants were more likely to describe upward (57%) than downward (43%) comparisons; however, this difference did not reach significance, $\chi^2(1, N = 116) = 2.21, p = .14$. As may be seen in Table 3, the most frequent domains of comparisons were academic/career-related, social skills and interpersonal attributes, and child-care abilities/housework. In order for the presentation of domain results to be consistent with those of Study 1a, we collapsed the social skills and interpersonal attributes domains into one category and the child-care abilities and housework domains into one category.

In contrast to Study 1a, in which participants were most likely to make comparisons about abilities/skills/knowledge, participants in Study 1b were most likely to report academic/career-related comparisons. It may be that academic/career-related comparisons are less frequent than other forms of comparisons but are especially significant in their consequences. For example, changes in one's partner's job status likely occur rarely but may have a strong impact on one's own life circumstances and so may be especially influential. Consistent with Study 1a, however, participants frequently reported comparisons associated with their social and

domestic life. Given that couples likely share many social interactions and responsibilities related to housework and child care, it is not surprising that such comparisons are perceived to be highly significant. Participants were least likely to report significant comparisons in the intimacy and opinions domains, two categories not included in Study 1a. Consistent with Study 1a, participants also made few comparisons about physical appearance.

Comparison Outcomes

*Self-evaluations, pleasantness, and satisfaction in response to comparison.*⁵ Means and standard deviations, as well as inter-correlations between self-evaluations, pleasantness of comparison, and satisfaction in response to the comparison, are presented in Table 4. Participants reported feeling better about themselves following downward ($M = 0.60, SD = 1.18$) than upward ($M = -0.30, SD = 1.30$) comparisons, $F(1, 112) = 17.60, p < .001$. In contrast to the self-evaluative results, participants reported feeling more pleasant following upward ($M = 0.38, SD = 1.44$) than downward ($M = -0.30, SD = 1.53$) comparisons, $F(1, 112) = 5.16, p = .03$.⁶ Consistent with the results for pleasantness, participants reported finding upward comparisons ($M = 0.52, SD = 1.54$) more satisfying than downward comparisons ($M = -0.14, SD = 1.40$), $F(1, 112) = 4.89, p = .03$.

Overall, although participants felt better about their own attributes following a downward than an upward comparison, their affective responses were in the opposite direction: They actually felt less pleasant and less satisfied following a downward than an upward comparison. These affective responses are consistent with

⁵ Our sample consisted of couples as well as individuals from the PDA study. Therefore, we needed to test whether there were sufficient statistical dependencies in the data to warrant using multilevel modeling analyses. The statistic used to test for nonindependence in the data was the intraclass correlation. The intraclass correlations for self-evaluative responses, pleasantness, and satisfaction in response to the comparison were all nonsignificant ($ps > .2$), and therefore there is no evidence of nonindependence in these data (Kenny & Kashy, 1991). Thus, the data were analyzed with traditional analysis of variance techniques.

⁶ There were main effects of gender for self-evaluations, $F(1, 112) = 5.72, p = .02$, and pleasantness of comparisons, $F(1, 112) = 3.89, p = .05$. Men reported higher self-evaluations ($M = 0.30, SD = 1.41$) after comparisons than did women ($M = -0.12, SD = 1.21$), and men reported significantly more pleasant responses ($M = 0.38, SD = 1.61$) to comparisons than did women ($M = -0.18, SD = 1.37$). Gender did not interact with comparison direction for any of the dependent variables.

Table 4
Correlation Coefficients and Means for Variables in Study 1b

Variable	1	2	3	4
1. Self-evaluations	—	.42***	.34***	.13
2. Pleasantness of comparison		—	.78***	.18†
3. Satisfaction in response to the comparison			—	.13
4. Relationship closeness				—
<i>M (SD)</i>	0.09 (1.32)	0.09 (1.51)	0.23 (1.51)	4.94 (0.92)

† $p < .10$. *** $p < .001$.

the overall experience-sampling findings, indicating that the more positive responses to upward than to downward comparisons hold even for highly significant comparisons.

Open-Ended Responses

Empathy, shared fate, and contrast. Two independent coders assessed responses for indications of empathy, shared fate, and self-evaluative contrast effects. Interrater agreement was high (86%); disagreements were resolved by discussion. Upward comparison responses were considered to indicate empathy if participants noted that they felt pride/admiration in or happiness for a superior partner. Downward comparison responses were considered to show empathy if participants indicated sympathy or sadness for an inferior partner. Responses were coded as indicating shared fate if participants indicated that they were benefiting from their association with a superior partner or being dragged down by an inferior partner. Responses were coded as indicating contrast reactions if participants reported that a superior partner made them feel worse about themselves or if an inferior partner made them feel better about themselves.

As may be seen in Table 5, the open-ended data indicated considerable instances of both empathy and shared fate but very few instances of contrast responses. Of interest, empathy was considerably more likely following upward than downward comparisons, $\chi^2(1, N = 116) = 16.97, p < .001$. Participants frequently noted that they were happy for a highly successful partner but rarely noted that they felt sad for a partner who performed poorly.

In contrast, shared fate responses were more likely after downward than after upward comparisons, $\chi^2(1, N = 116) = 4.50, p =$

.03. For example, as one husband who made a downward comparison in the domain of social skills noted, "It made me feel I have more responsibility to meet people for both of us." Similarly, a wife who compared her superior housekeeping skills to those of her husband observed, "I find the extra work to be a burden and feel that he's not pulling his weight around the apartment, and symbolically in the marriage. . . . The comparison made me feel alone in the relationship and burdened. I also felt disrespected." Thus, in domains in which both partners contribute to a shared outcome, individuals may feel irritated with or even dragged down by an inferior partner.

Contrast responses were rare and were no more likely after upward than after downward comparisons, $\chi^2(1, N = 116) = 0.07, p = .80$. Thus, in describing their open-ended responses to the comparisons, participants were very unlikely to indicate that upward comparisons had made them feel worse about themselves or that downward comparisons had made them feel better about themselves.

In sum, the open-ended data suggest that both empathy and shared outcomes influence affective responses to comparisons within relationships. Participants may be more likely to respond positively to a superior relationship partner because they are proud of and happy for the partner. Participants may respond negatively to downward comparisons because they are being dragged down by what they perceive to be the partner's shortcomings.

Self-Reported Behavioral Responses

Two independent raters coded responses for evidence of changing closeness (increasing closeness, distancing) and changing performance (motivation to improve, motivation to help the partner). Agreement between the raters was high (95%); disagreements were resolved through discussion.

Changing closeness. Because upward comparisons were expected to be more pleasant than downward comparisons, we had predicted that participants would pull closer to a superior partner and distance themselves from an inferior partner. Responses to both forms of comparisons were coded for instances of enhanced closeness (e.g., "I feel very happy and more close to my partner") or distancing the self from the partner (e.g., "I would relocate to another room to do things on my own," "I want to get more space for myself," "It would tend to make me emotionally detached from my partner and ignore her"). As can be seen in Table 5, participants were more likely to indicate enhanced closeness after upward than after downward comparisons; however, this difference did not reach significance, $\chi^2(1, N = 116) = 3.39, p = .07$.

Table 5
Responses to Most Significant Comparisons by Direction, in Percents (Study 1b)

Direction	Response						
	Empathy	Shared fate	Contrast	Pull closer	Distance	Improve self	Help partner
UC	45	29	14	26	6	42	9
DC	10	48	12	12	20	4	26
Total	30	37	13	20	12	26	16

Note. The values within a row refer to the proportion of upward comparisons (UC), downward comparisons (DC), and total comparisons, respectively, in which the response was present. Some participants' responses were coded in more than one response category.

Participants were more likely to indicate that they distanced themselves from their partner following downward than upward comparisons, $\chi^2(1) = 5.21, p = .02$.

Changing performance. We had predicted that because both upward and downward comparisons are less comfortable than similarity between partners, participants would attempt to reestablish equilibrium following comparisons; that is, they would attempt to boost their own performance following an upward comparison and attempt to raise their partner's performance following a downward comparison. Responses were considered to show self-boosting if participants indicated that they were motivated to improve their performance in the comparison domain (e.g., "made me want to develop that ability more in myself," "made me more encouraged to come up to his level"), and partner boosting if participants indicated that they tried to offer help and support to their partner (e.g., "I was more helpful and supportive," "made me realize I had to support my partner more so that he could improve").

Almost half of the participants who made an upward comparison indicated that they sought to improve their own performance; as can be seen in Table 5, self-boosting was considerably more common after upward than after downward comparisons, $\chi^2(1, N = 116) = 21.91, p < .001$. For example and, as one wife, who made an upward comparison to her more pleasant and socially skilled husband, noted, "it [the comparison] caused me to reflect on my behaviour; caused me to strive to be more like my husband and be a NICER person." Similarly, a husband noted, "I compared my income vs. her income. I did this to use as a gauge, a guide of the potential I can achieve in earning income. Not in a jealous way but more as an inspiration."

In contrast, partner boosting was more common after downward than after upward comparisons, $\chi^2(1, N = 116) = 5.94, p = .02$. As one husband, who compared his wife's inferior social skills to his own, noted, "the comparison made me want to help my partner in becoming more assertive and confident. . . . I became more encouraging." Another husband, noting his wife's weaker job interview skills, observed, "I thought I should help her to get the job . . . I thought I should help her to make her feel better. I told her my opinion and asked her to read some articles about how to deal with this kind of situation. I felt she needs me and my help." Thus, participants appeared to try to boost themselves following an upward comparison and boost their partner following a downward comparison.

Relationship Closeness

In contrast to the results of Study 1a, in which relationship closeness was associated with making relatively more upward than downward comparisons, relationship closeness in Study 1b was not a significant predictor of comparison direction ($\beta = .09, p = .67$). Whereas Study 1a assessed the frequency of all comparisons made, Study 1b focused on participants' most significant comparisons. It may be that when all daily comparisons are taken into account, both trivial and significant, higher closeness is associated with more frequent upward comparisons. However, when considering comparisons that are especially significant, higher closeness individuals may be equally likely to nominate upward and downward comparisons. They may be just as likely to view as significant those comparisons in which the partner is less successful, and

therefore requires their support or assistance, as those in which the self is less successful, and therefore requires their engagement in self-improvement strategies. In addition, there were no main effects of relationship closeness or interactions with relationship closeness for self-evaluations in response to the comparison, pleasantness of comparison, or satisfaction in response to the comparison (all $ps > .30$). These results are contrary to our predictions but consistent with the results of Study 1a, in which closeness did not moderate the affective impact of comparison direction.

Relationship closeness was not associated with empathy or shared fate (both $ps > .13$). However, there was a relationship closeness by direction interaction in predicting contrast ($\beta = -1.96, p = .02$). Simple effects analyses revealed that there was no association between relationship closeness and contrast following downward comparisons ($\beta = .69, p = .27$) but that participants higher in relationship closeness were less likely to report contrast responses following upward comparisons than were participants lower in relationship closeness ($\beta = -1.27, p = .02$). That is, participants higher in closeness were less likely to feel badly about themselves than were those lower in closeness after comparing themselves to a superior partner.

There were no main effects of relationship closeness for changing performance or drawing closer (all $ps > .12$). However, relationship closeness was significantly associated with self-reported distancing behavior: Specifically, participants who were higher in closeness were less likely to report distancing themselves from their spouse following comparisons than were those lower in closeness ($\beta = -.83, p = .02$). No other interactions with relationship closeness emerged (all $ps > .44$).

Thus, individuals higher in closeness did not report more empathy and shared fate responses to comparisons than did individuals lower in closeness. However, they were less likely to report negative contrast responses to upward comparisons than were individuals lower in closeness; that is, they were less likely to report that a superior partner made them feel badly about themselves. Finally, as one might expect, individuals higher in closeness were less likely to engage in distancing behaviors with their spouse after making a social comparison.

Discussion

Taken together, the data on participants' most significant comparisons provide important evidence about how and why comparisons to relationship partners may differ from comparisons to friends or acquaintances. Although participants reported that they felt better about themselves after downward than after upward comparisons, their affective reactions to these comparisons were very different: They felt more pleasant and satisfied following upward than downward comparisons. Evidently, affective reactions to comparisons to one's spouse are determined by factors other than simple self-evaluative effects. Instead, affective reactions to intrarerelationship comparisons appear to be influenced by individuals' highly close connection with their partner. Because one's identity overlaps with the partner, one can experience the comparison from the partner's perspective, sharing and taking pride in the joys of a successful partner and joining in the sorrows of an unsuccessful partner. Our data suggest that this empathic response may be especially evident following upward comparisons. Moreover, because one's outcomes are interdependent with

those of the partner, one enjoys the benefits of the partner's successes and suffers the costs of the partner's failures; this shared fate response appears to be especially evident following downward comparisons. These two consequences of one's close bond with the partner—empathy and shared outcomes—may together explain why comparisons in the context of a marriage appear to function so differently from comparisons in other relationships.

Indeed, an emphasis on empathy for the partner and awareness of shared outcomes may provide individuals with the means of protecting themselves from possible threats posed by upward comparisons. One may acknowledge that an upward comparison is threatening to one's self-evaluations, highlighting one's inferiority in some domain. However, the comparison may be viewed more positively in the context of the relationship; the partner's success provides a kind of silver lining, in that one is both happy for the partner and also may potentially benefit from the partner's achievements. By focusing on the partner's success rather than one's own inferiority, moreover, one may deflect any possible negative relationship consequences arising from the comparison. Consistent with this possibility, past research suggests that individuals can engage in motivated cognitive processing, reconstruing negative information related to their relationship in order to maintain their satisfaction with their partner and the relationship (Murray, 1999; Murray & Holmes, 1999). For example, individuals may recognize their partner's faults but deal with these imperfections by turning them into virtues (Murray & Holmes, 1993, 1994, 1999). Similarly, following upward comparisons, individuals may acknowledge their own relative inferiority but may focus on the benefits to the partner and recognize that the partner's success is good for their relationship. Such strategies may be most common among highly satisfied couples (Murray & Holmes, 1999). In future research, it will be important to examine whether positive responses to upward comparisons are limited to individuals who report especially high levels of baseline relationship satisfaction before any comparison responses are assessed.

The open-ended data also suggest that self-reported behavioral responses to comparisons within relationships may be very different from those observed in response to other forms of social comparison. Past research suggests that when an upward comparison to a close other threatens self-perceptions, one will distance oneself from the other (Pleban & Tesser, 1981). Our study suggests instead that individuals tend to feel closer to the partner following an upward comparison; despite the negative self-evaluative impact of the comparison, the relationship appears to be strengthened rather than weakened. Downward comparisons, in contrast, appear to be somewhat distressing, despite their positive self-evaluative results; individuals often reported increasing the distance between themselves and their partner, either psychologically or physically, when their partner's performance was poor. Because their partner's poor performance had negative implications for their own lives, they may have been unable to enjoy their superior status.

Comparisons to the partner also appeared to affect self-reported behaviors aimed at changing the discrepancy in performance between self and partner. Past research suggests that individuals who wish to avoid a threatening upward comparison to a friend may actually sabotage the friend's performance, closing the gap by bringing the friend down a peg (Tesser & Smith, 1980). In the context of relationships, comparisons that diminish self-

evaluations appear to have more benign results: Instead of attempting to bring the partner down to their own level, individuals are inspired to improve their own performance so they can rise to the partner's level. Moreover, even though downward comparisons may boost self-evaluations, participants may be motivated to reduce the gap that has resulted in their superiority by offering the partner help, raising the partner to their own level. If a poorly performing partner is dragging one down, one has a vested interest in helping that partner to improve.

Our predictions with respect to relationship closeness were not supported. Consistent with Study 1a, relationship closeness did not appear to moderate the impact of comparison direction on the key dependent variables.

Study 2: Empathy and Shared Fate Following Comparisons With Spouses Versus Friends

We have argued that individuals respond differently to comparisons with spouses than with friends because they experience empathy and shared fate to a greater degree with spouses. However, Studies 1a and 1b do not provide any direct evidence of this. In Study 2, we compared the degree of empathy and shared fate experienced following comparisons to partners and friends.

In general, we might expect individuals to experience greater empathy for partners than for friends (Scinta & Gable, 2005). To the extent that one's partner is part of one's identity, one may be especially likely to experience the partner's successes and failures as one's own, feeling happy for a successful partner and sad for an unsuccessful partner. Moreover, given that married individuals typically share significant resources and tasks, such as money and domestic responsibilities, they may also be more likely to experience shared fate responses to partners than friends. For example, one's salary increase is more likely to confer benefits on a spouse than on a friend. Similarly, one's poor housekeeping skills may become a burden to the spouse who has to pick up the slack. Resources, however, may also be shared in such areas as knowledge and social assets (Aron & Aron, 1986; Aron et al., 2004, 2005); in some circumstances, these assets may be shared as much with friends as with partners. For example, if one's friend is extremely popular socially, one may increase one's own social circle and social opportunities. Thus, in some domains, individuals may share outcomes with friends as well as partners. We examined this possibility in Study 2. Participants imagined comparisons either to their spouse or to a friend in the domain of income or social skills; they then indicated the extent to which their affective responses would be influenced by their empathy for the other and the extent to which they would share outcomes with the other.

We expected that participants would experience more empathy for a partner than for a friend in both domains. However, we expected that although participants would experience more shared outcomes with a partner in response to the income scenario, they would be equally likely to report shared outcomes with a partner as with a friend in the social skills scenario. Having a socially successful friend or partner can improve one's own social standing, increasing the frequency and positivity of one's own social interactions and boosting one's own social popularity. Having a socially unsuccessful friend or partner can engender social costs, to the extent that one is branded as a social "loser" owing to one's contact with the socially unsuccessful other. Thus, for this sce-

nario, we expected that participants would experience shared fate outcomes with both a friend and a partner. In contrast, in the income scenario, we expected that participants would experience shared fate outcomes only when the comparison involved their partner. If one's friend has a high or low salary, one's own material circumstances are unlikely to change significantly. In contrast, if one's spouse experiences a boost or drop in salary, one's own circumstances may undergo a drastic change, given that financial resources in a marriage are typically pooled.

Method

Participants

Participants were 48 male and 68 female members of the community who had responded to a newspaper advertisement for a study about perceptions of relationships. Participants were paid \$20 CAD for taking part in the study. The average age of participants was 43.3 years ($SD = 12.9$). All participants had been married for at least 1 year ($M = 13.01$ years, $SD = 11.76$), and the mean number of children living in the home was 0.78 ($SD = 1.12$). The average family income was \$60,000 CAD. All participants had at least a high school education. In addition, 18% of participants had completed some college or university, 36% had completed university, and 18% had completed a graduate or professional degree. Two female participants were deleted from the analyses because they were stay-at-home parents without a personal income; consequently, the income comparison scenario would not have been relevant to them. There were no gender effects, and therefore gender is not discussed further.

Procedure

Participants were randomly assigned to answer questions about either a good friend or their spouse, and to imagine one of two upward or downward comparison scenarios. In the social skills scenario, participants were asked to imagine that their friend (or spouse) was either more or less socially successful in terms of meeting people, striking up conversations at parties, and making friends. In the income scenario, participants were asked to imagine that their friend (or spouse) was going to be earning significantly more or less than they themselves were. Each participant imagined one scenario (e.g., friend/upward comparison/social skills scenario, spouse/downward comparison/income scenario). Thus, we had a 2 (comparison direction: upward or downward) by 2 (scenario type: social skills or income) by 2 (comparison target: friend or partner) between-participants design.

After imagining the scenario, participants were asked to rate the extent to which they agreed or disagreed with a set of statements regarding their responses to the comparison scenario. Four items were designed to tap empathy in the upward comparison scenarios (e.g., "I would be pleased with the situation because I would be happy for my partner [friend]"); four items were designed to tap empathy in the downward comparison scenarios (e.g., "I would be displeased with the situation because it would make my partner [friend] unhappy"). Five items were designed to tap the benefits experienced through shared fate in the upward comparison scenarios (e.g., "I would be pleased with the situation because I would benefit from my partner's [friend's] social skills [income]"). Five

items were designed to tap the costs experienced through shared fate in the downward comparison scenarios (e.g., "I would be displeased with the situation because I would feel burdened by having to carry the relationship [friendship] socially [financially]"). Ratings were made on a 7-point scale with endpoints labeled 1 (*strongly disagree*) and 7 (*strongly agree*).

We predicted that participants would report greater empathy for spouses than for friends, regardless of the scenario. We predicted that participants would report stronger shared fate responses to spouses than to friends for the income scenario but equally strong shared fate responses to spouses and friends for the social skills scenario.

Results

Upward Comparison Scenarios

Upward empathy items were combined into a single index (Cronbach's $\alpha = .78$; $M = 5.61$, $SD = 1.30$). As predicted, a 2 (comparison target: friend or partner) by 2 (scenario: social skills or income) analysis of variance revealed a significant main effect of comparison target, $F(1, 50) = 4.48$, $p = .04$. Across scenarios, participants were significantly more likely to report feeling empathy following a comparison with a spouse ($M = 5.86$, $SD = 1.27$) than with a friend ($M = 5.08$, $SD = 1.23$). Neither the main effect of scenario nor the comparison target by scenario type interaction was significant (both $ps > .20$).

Shared fate items were combined into a single index (Cronbach's $\alpha = .95$; $M = 5.04$, $SD = 2.00$). The upward comparison empathy index and the upward comparison shared fate index were positively correlated ($r = .66$, $p < .001$). The main effect of target was significant, $F(1, 50) = 16.88$, $p < .001$; participants reported more shared fate with a spouse ($M = 5.66$, $SD = 1.48$) than with a friend ($M = 3.69$, $SD = 2.36$). The main effect of scenario was also significant, $F(1, 50) = 18.75$, $p < .001$; participants reported experiencing more shared fate with the social skills ($M = 5.82$, $SD = 1.51$) than with the income ($M = 4.26$, $SD = 2.16$) scenario. As predicted, however, these main effects were qualified by a significant target type by scenario interaction, $F(1, 50) = 7.75$, $p = .008$. Simple effects revealed that participants were more likely to experience shared fate responses to a spouse ($M = 5.30$, $SD = 1.61$) than to a friend ($M = 2.18$, $SD = 1.49$) for the income scenario, $F(1, 50) = 23.53$, $p < .001$; shared fate scores for spouse ($M = 6.00$, $SD = 1.29$) and friend ($M = 5.40$, $SD = 1.97$) did not differ significantly for the social skills scenario ($F < 1$). Thus, in the income scenario, in which benefits are more likely to accrue from an association with a superior partner than with a superior friend, participants reported more shared fate responses to the partner. In the social skills scenario, in which benefits are likely to accrue from an association with either a friend or a partner, participants reported that they would experience gains from both relationships.

Downward Comparison Scenarios

We next examined responses for empathy and shared fate for downward comparisons. Empathy items were combined into a single index (Cronbach's $\alpha = .89$; $M = 4.13$, $SD = 1.93$), as were shared fate items (Cronbach's $\alpha = .89$; $M = 2.92$, $SD = 1.72$). The

downward comparison empathy index and the downward comparison shared fate index were positively correlated ($r = .59, p < .001$). Unexpectedly, there were no main effects or interactions for either empathy or shared fate (all $ps > .30$). Empathy and shared fate responses were low across both target types, suggesting that for these scenarios, individuals did not experience empathy or shared fate to a strong degree for either a partner or a friend. Indeed, empathy across scenarios was significantly lower following downward than upward comparisons, $F(1, 112) = 23.71, p < .001$. Similarly, shared fate across scenarios was also significantly lower following downward than upward comparisons, $F(1, 112) = 36.80, p < .001$.

Discussion

In sum, participants were more likely to report that they would empathize with a superior partner than with a superior friend when making a comparison about either social skills or income. In contrast, participants reported stronger shared fate responses to a partner than to a friend only for the scenario in which they would be especially likely to share resources with a partner rather than a friend. Specifically, participants were more likely to report that they would benefit from their association with a financially successful spouse than with a financially successful friend. In the social skills scenario, in which one might benefit from either a socially skilled partner or a socially skilled friend, participants did not differ in the shared fate boost they expected to experience from their association with a partner or a friend. Although individuals may share outcomes with friends in some domains, as with social skills, it seems likely that outcomes will be shared with partners in a wider variety of domains. Given that spouses typically live together and often share responsibilities in such areas as finances, home maintenance, and child care, they may be especially likely to experience shared fate responses to comparisons with their partner.

Past research suggests that although individuals typically respond negatively to superior friends and acquaintances (e.g., Tesser, 1988; Wheeler & Miyake, 1992), they tend to respond positively to superior relationship partners (Beach et al., 1998; Lockwood et al., 2004; McFarland et al., 2001; Scinta & Gable, 2005), possibly because they empathize with the partner to a greater degree (Beach et al., 1998). Study 2 provides the first evidence examining the source of this more positive response to upward comparisons with a partner than with a friend. It appears that individuals' more pleasurable response to being outperformed by a partner may be tied both to their higher level of empathy with the partner and, in some domains, to their higher level of shared outcomes with the partner.

Unexpectedly, we did not find greater empathy and shared fate in response to a partner than to a friend for downward comparisons. It may be that these scenarios were not sufficiently compelling to warrant feeling saddened or dragged down by a partner. For example, finding out that one's partner earns less than oneself may not lead one to feel disadvantaged unless the partner is receiving a significant pay cut that will actually have a negative impact on one's lifestyle. Consistent with this possibility, both empathy and shared fate responses were significantly lower for downward than for upward comparisons, suggesting that the downward scenarios did not evoke these responses for either a partner or a friend.

Study 3: Impact of Comparisons to a Relationship Partner for Domains High or Low in Self and Partner Relevance

Taken together, the data from Studies 1b and 2 provide strong evidence that individuals feel more satisfied after upward than after downward comparisons because they empathize with and share the benefits of their partner's successes. However, it is possible that individuals experience such positive responses to upward comparisons only when they perceive the comparison domain to be more important to their partner than to themselves. According to research examining the extended self-evaluation maintenance model (Beach et al., 1998), individuals are more likely to respond positively to upward relative to downward comparisons in domains high in relevance to the partner but low in relevance to the self. For example, an individual may find it easier to enjoy her partner's tennis success if her partner cares about tennis performance and she herself does not. If tennis is more important to her than to her partner, in contrast, she may find it more difficult to take pleasure in her partner's superiority. In Study 3, we measured the importance of the comparison domain to both self and partner to examine whether more positive responses to upward than to downward comparisons would be limited to domains low in self-relevance. We predicted that positive affective responses to upward comparisons and negative affective responses to downward comparisons would occur even in domains high in self-relevance. That is, one may derive satisfaction from one's partner's success even if the partner is superior in a domain that is important to oneself. Because one empathizes and shares outcomes with the partner, one may be positively affected by the partner's success in spite of any negative implications for the self. Similarly, one may be dissatisfied with a partner's failures even if the partner's poor performance highlights one's own successes in a domain important to the self; one's sense that the partner's inadequacies are pulling one down may outweigh any benefits to one's self-esteem.

We also used Study 3 to examine in greater detail the aspects of the relationship that would produce more positive affective responses to upward than to downward comparisons. Comparisons to a partner likely affect not only one's self-evaluations but also one's evaluations of one's partner and of one's relationship more generally. The results of Study 1b illustrated a disconnection between self-evaluative and affective responses such that comparisons that were associated with more negative self-perceptions were also associated with more positive affect. We propose that in the context of a very close relationship, affective responses might be driven less by the comparison's impact on self-regard than by the comparison's impact on the relationship as a whole. That is, if one's partner is very successful, one might feel somewhat less competent in that comparison domain, but one might simultaneously feel more satisfied to be connected to such a stellar partner. Because individuals in highly close relationships are strongly interconnected with their partner, this higher satisfaction with the partner and the relationship might have a greater impact on one's affect than would the negative self-evaluative implications of the comparison. Moreover, to the extent that an upward comparison poses a threat to self-evaluations, individuals may be especially likely to focus on the positive qualities of their partner and their relationship as a means of protecting themselves from this threat (Lockwood et al., 2004); these enhanced perceptions of

the partner and the relationship may in turn boost affect. Thus, affect may be particularly positive following upward comparisons. In Study 3, we tested this notion more directly: We asked participants to indicate not only how the comparison affected their self-perceptions but also how it affected their perceptions of their partner and the relationship. We predicted that the comparison's influence on relational variables (perceptions of the partner and the relationship) would predict affective responses over and above the comparison's impact on self-evaluations.

Method

Participants

Participants were 67 men and 68 women who completed a 30-min questionnaire session as part of a larger study on personality and relationship outcomes, for which they were paid \$50 CAD. Participants were recruited either through newspaper advertisements or through the Department of Psychology's Adult Volunteer Pool at the University of Toronto. Fifty-five participants were in steady dating relationships, 6 were engaged, 16 were cohabiting, and 57 were married. One male participant did not specify his relationship status. The average age of participants was 46.1 years ($SD = 16.4$). Fifty percent of participants had at least one child ($M = 1.15$, $SD = 1.42$, across full sample). Mean number of children living in the home was 0.38 ($SD = 0.81$). Participants had been involved with their romantic partner for 14.3 years on average (dating participants: $M = 3.5$ years, $SD = 3.4$; married/cohabiting/engaged participants: $M = 22.4$ years, $SD = 17.9$). Average annual household income was \$54,600 CAD. Eighteen percent of participants had a high school education; 19% had completed some college, and 63% had completed college or a postgraduate degree.

Three female participants failed to complete the measure assessing comparison direction and therefore were excluded from the analyses. Altogether, 67 men and 65 women were included in the analyses.

Procedure

Participants first completed a questionnaire assessing relationship status and other basic demographic variables. Next, participants completed the same measure of closeness (Lockwood et al., 2004) as in Study 1a; however, the rating scale was changed from a 7-point scale to an 11-point scale with endpoints labeled -5 (*strongly disagree*) and 5 (*strongly agree*). Participants then completed a measure regarding the most significant comparison they had made to their partner in the preceding 2 weeks. As in Study 1b, they were asked to briefly describe this comparison, to indicate the comparison direction, and to select the domain in which this comparison occurred from a list of 12 options: academic/career-related, social skills/interpersonal attributes, personality characteristics, abilities/talents, physical appearance, wealth, child-care/housework/family responsibilities, health, intimacy, recreational activities, opinions, and other. Participants then indicated how important this domain was to themselves and to their partner. Ratings for self and partner were each made on a 7-point scale with endpoints ranging from -3 (*not at all important*) to 3 (*very important*).

Participants next completed measures assessing the impact of the comparison. They first rated the impact of the comparison on their self-perceptions on a 7-point scale with endpoints ranging from -3 (*made me feel much worse about myself than usual*) to 3 (*made me feel much better about myself than usual*). They then rated the impact of the comparison on their evaluations of their partner; ratings were made on a 7-point scale with endpoints ranging from -3 (*made me feel much worse about my partner than usual*) to 3 (*made me feel much better about my partner than usual*). They next rated how the comparison affected their satisfaction with their relationship on a 7-point scale with endpoints ranging from -3 (*made me feel much less satisfied than usual*) to 3 (*made me feel much more satisfied than usual*).

Finally, participants completed a measure of their overall affective response to the comparison. They rated the extent to which the comparison made them feel each of four positive affect terms (*happy, pleasant, pleased, encouraged*) and each of four negative affect terms (*discouraged, unpleasant, sad, tense*); ratings were made on a 7-point scale with endpoints ranging from 1 (*not at all*) to 7 (*very much*).

Results and Discussion

Background Questionnaire

The average closeness score was 0.69 ($SD = 1.41$), and men's closeness scores ($M = 0.75$, $SD = 1.52$) were not significantly different from women's closeness scores ($M = 0.63$, $SD = 1.30$), $t(106) = 0.47$, $p = .64$. Gender was examined as a variable in all analyses, but there were no significant gender effects. Therefore, gender is not discussed further.

Frequency Data

Comparison direction. Of the evaluative comparisons reported, participants were more likely to describe downward (58.7%) than upward comparisons (41.3%); however, this difference did not reach significance, $\chi^2(1, N = 109) = 3.31$, $p = .07$. Thus, consistent with Studies 1a and 1b, there was no significant difference in the frequency of upward and downward comparisons. However, whereas in Studies 1a and 1b there was a tendency for participants to report more upward than downward comparisons, in Study 3 the trend was in the opposite direction. Thus, across these studies, it remains unclear whether upward or downward comparisons to romantic partners will be most common.

Comparison domain. Frequency of comparison by domain is presented in Table 6. Because the exact domain categorizations varied to some degree across the three studies, a direct comparison of domain frequency is not possible. However, we note that, consistent with Studies 1a and 1b, comparisons were especially common in the domains of child-care/housework/family responsibilities and social skills/interpersonal attributes. Evidently, individuals are very likely to compare their effectiveness in domestic and social activities. Also consistent with Studies 1a and 1b, comparisons on physical appearance were rare.

In contrast to Studies 1a and 1b, the most frequent domain of comparison in Study 3 was personality characteristics. However, we note that comparisons on general traits were also relatively common in Study 1a (15.8%) and were not infrequent in Study 1b

Table 6
Percentage of Most Significant Comparisons by Direction and Domain (Study 3)

Direction	Domain												Total
	A/C	SS/I	PC	A/T	PA	W	C/H/F	H	I	RA	OP	OT	
UC	4.7	7.5	7.5	0.9	0.9	2.8	4.7	1.9	3.8	1.9	0.9	2.8	40.6
DC	2.8	5.7	14.2	0.0	0.0	5.7	9.7	5.7	9.4	0.0	2.8	3.8	59.4
Total	7.5	13.2	21.7	0.9	0.9	8.5	14.2	7.5	13.2	1.9	3.8	6.6	100.0

Note. Five comparisons in which multiple domains were identified are not included. UC = upward comparison; DC = downward comparison. A/C = academic/career-related; SS/I = social skills/interpersonal attributes; PC = personality characteristics; A/T = abilities/talents; PA = physical appearance; W = wealth; C/H/F = child-care/housework/family responsibilities; H = health; I = intimacy; RA = recreational activities; OP = opinions; OT = other.

(10%), suggesting that personality is indeed an important domain for comparisons between romantic partners. Comparisons in the domain of intimacy were more common in Study 3 (13.2%) than in Study 1b (0.9%), possibly owing to the nature of the sample. (Intimacy was not included as a domain category in Study 1a.) Study 3 included both dating and married individuals, whereas Study 1b included only married individuals. Of note, dating participants made significantly more comparisons in the intimacy domain than did married participants in Study 3, $\chi^2(1, N = 14) = 4.57, p = .03$. It may be that dating individuals make intimacy-related comparisons in part to determine whether they will be well-matched partners in the longer term. In contrast, married individuals have presumably already established some degree of physical and emotional compatibility, so that intimacy comparisons are somewhat less frequent than among dating partners. However, because the present study did not specifically examine participants' motivation for making comparisons in given domains, we do not have strong support for this possibility. In future research, it will be useful to examine whether comparisons may serve different functions at different stages in a relationship.

Comparison Outcomes

*Comparison impact on self-perceptions.*⁷ Means and standard deviations, as well as intercorrelations between the variables in Study 3, are presented in Table 7. One participant was excluded from this analysis because she did not complete the self-perception item. The main effect of comparison direction was significant, $F(1, 104) = 39.90, p < .001$. Participants reported more positive perceptions of themselves following downward ($M = 0.62, SD = 1.49$) than upward comparisons ($M = -1.04, SD = 1.09$), $t(106) = -6.72, p < .001$. Thus, consistent with the results of Study 1b, participants reported feeling better about themselves following downward than upward comparisons.

Comparison impact on perceptions of partner. The main effect of comparison direction was significant, $F(1, 105) = 55.10, p < .001$. Participants reported more positive perceptions of their partner following upward ($M = 1.27, SD = 1.56$) than downward comparisons ($M = -0.84, SD = 1.42$), $t(107) = 7.35, p < .001$.

Comparison impact on perceptions of relationship. The main effect of comparison direction was significant, $F(1, 105) = 18.84, p < .001$. Participants reported more positive perceptions of their relationship following upward ($M = 0.82, SD = 1.67$) than downward comparisons ($M = -0.48, SD = 1.46$), $t(107) = 4.34, p < .001$.

Comparison impact on overall affect. The main effect of comparison direction was significant, $F(1, 97) = 14.33, p < .001$. Participants reported more positive affective reactions to upward ($M = 0.66, SD = 3.19$) than to downward comparisons ($M = -1.49, SD = 2.59$), $t(77) = 3.61, p = .001$. The pattern of results remained the same when separate dependent variables for positive affect and negative affect were used. Upward comparisons ($M = 3.42, SD = 2.08$) were associated with significantly more positive affect than downward comparisons ($M = 2.49, SD = 1.58$), $t(74) = 2.48, p = .02$. Downward comparisons ($M = 3.91, SD = 1.61$) were associated with significantly more negative affect than upward comparisons ($M = 2.68, SD = 1.59$), $t(89) = -3.82, p < .001$.

Thus, although participants indicated that they evaluated themselves more negatively after upward than after downward comparisons, they reported that upward comparisons made them feel better about their partner and their relationship than did downward comparisons. In addition, consistent with Studies 1a and 1b, participants reported a more positive overall affective response to upward than to downward comparisons.

Regression Analyses

Predictors of overall affect. We predicted that participants would report feeling better after upward than after downward comparisons because their affective reactions to these comparisons would be driven not only by their perceptions of themselves but also by their perceptions of the partner and the relationship. That is, although one might feel somewhat threatened by finding out that one is earning less than one's partner, this negative consequence may be offset by the fact that one is proud of and happy for the partner and that one feels good about being in a relationship with this successful other. Indeed, individuals may use their positive feelings for their partner and their relationship as a means of compensating for a self-evaluative threat. Further, their affective

⁷ In contrast to Studies 1a and 1b, Study 3 involved both dating and married/engaged/cohabiting participants. Our sample size was not sufficiently large to allow for extensive comparisons between these groups. However, we note that effects for married participants were generally stronger than effects for dating participants. That is, married individuals appeared to be more positively affected by upward relative to downward comparisons than were dating individuals. This is not surprising, given that married individuals are more likely to share outcomes with their spouses than are dating individuals.

Table 7
Correlation Coefficients and Means for Variables in Study 3

Variable	1	2	3	4	5	6	7
1. Self-perceptions	—	-.12	.13	.19 [†]	.16 [†]	-.08	.08
2. Perceptions of partner		—	.82***	.60***	-.18 [†]	.43***	.33**
3. Perceptions of relationship			—	.77***	-.07	.38***	.41***
4. Overall affect				—	-.10	.31**	.23*
5. Self relevance					—	.02	-.02
6. Partner relevance						—	.18 [†]
7. Relationship closeness							—
<i>M (SD)</i>	-0.07 (1.56)	0.03 (1.80)	0.06 (1.67)	-0.60 (3.03)	2.25 (1.06)	1.46 (1.70)	0.69 (1.41)

Note. Self-relevance = relevance of comparison domain to self; partner relevance = relevance of comparison domain to partner.

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

response to the comparison may be driven not simply by the impact of the comparison on self-evaluations but also by the impact of the comparison on their perceptions of their partner and their relationship. To the extent that upward comparisons are associated with highly positive perceptions of the partner and the relationship, affect may be boosted.

Accordingly, we next examined the relation between the comparison's impact on each of the specific components of self, partner, and relationship and the participants' overall affective reaction to the comparison. We first regressed overall affect on self-evaluations and obtained a significant effect ($R^2 = .04$, $\beta = .19$, $p = .05$), with more positive self-regard predicting more positive affect. We then added evaluations of partner to the model ($R^2 = .42$, $p < .001$); both self-evaluations ($\beta = .26$, $p = .001$) and evaluations of partner ($\beta = .63$, $p < .001$) significantly predicted unique variance in overall affect. Finally, we included change in relationship satisfaction following the comparison in the model ($R^2 = .60$, $p < .001$). Change in relationship satisfaction predicted affect over and above the other two variables ($\beta = .78$, $p < .001$); greater relationship satisfaction following a comparison predicted more positive affective responses to comparisons. Neither self-evaluations nor evaluations of partner remained significant predictors (both $ps > .37$). We obtained the identical pattern of results when regressing positive affect and negative affect, separately, on self-evaluations, evaluations of the partner, and change in relationship satisfaction.

Thus, individuals' affective responses to comparisons with their partner appear to be strongly associated with how the comparison makes them feel about their relationship. Participants reported that upward comparisons made them feel worse about themselves than did downward comparisons, but this threatening effect on self-evaluations appeared to be offset by the boost that the superior other provided to relationship satisfaction. Although a superior partner may threaten one's self-perceptions, one is nevertheless more satisfied to be in a relationship with this high-achieving other, and consequently one is happier overall. Conversely, although an inferior partner may boost one's self-evaluations, one may be dissatisfied to be yoked to this low-achieving other and consequently may be less happy overall.

Relevance of comparison domain to self and partner. We next examined the extent to which responses to upward and downward comparisons were determined by the relevance of the comparison domain to self and partner. We conducted a series of regression

analyses to examine the possible interactions of self-relevance and partner relevance of domain with comparison direction (upward or downward). We first examined possible interactions among these variables on how the comparison affected self-evaluations. The three-way self-relevance by partner relevance by comparison direction interaction was not significant, nor were any of the two-way interactions (all $ps > .20$). Thus, participants reported feeling better about themselves after downward than after upward comparisons regardless of how important the comparison domain was to themselves or to their partner.

We next examined possible interactions among these variables on how the comparison affected evaluations of the partner. The three-way self-relevance by partner relevance by comparison direction interaction was not significant ($\beta = -.10$, $p = .47$). The two-way self-relevance by comparison direction interaction also was not significant ($\beta = .05$, $p = .68$). However, the two-way partner relevance by comparison direction interaction was significant ($\beta = -.36$, $p = .04$). Simple effects analyses revealed that partner relevance was positively associated with perceptions of partner following upward comparisons ($\beta = .40$, $p = .007$) and with perceptions of partner following downward comparisons ($\beta = .26$, $p = .04$). Participants were likely to view their partner positively both when the partner had excelled in a domain important to the partner and when participants themselves had excelled in a domain important to the partner.

We then examined possible interactions among these variables on how the comparison affected perceptions of the relationship. The three-way self-relevance by partner relevance by comparison direction interaction was not significant, nor were any of the key two-way interactions (all $ps > .30$). Thus, participants reported feeling better about their relationship after upward than after downward comparisons, regardless of how important the comparison domain was to themselves or to their partner.

Finally, we examined whether importance of domain to self and partner would interact with comparison direction to determine the overall affective response to the comparison. The three-way self-relevance by partner relevance by comparison direction interaction was not significant ($\beta = .03$, $p = .89$). The two-way self-relevance by comparison direction interaction also was not significant ($\beta = -.07$, $p = .66$). However, the partner relevance by comparison direction interaction approached significance ($\beta = -.37$, $p = .08$). Simple effects analyses revealed that partner relevance was positively associated with overall affect following upward ($\beta = .32$,

$p = .04$) but not downward ($\beta = .16, p = .23$) comparisons. Participants reported experiencing the most positive affect when outperformed by their partner in a domain important to the partner. The regression analyses conducted using separate positive and negative affect indexes did not reveal any significant interactions for positive affect or negative affect (all $ps > .16$). These results are inconsistent with the results for the combined overall affect index, in which there was a partner relevance by comparison direction interaction that approached significance. Given that this interaction failed to reach significance using the overall affect index, it is not surprising that analyses using the separate positive and negative affect indexes also did not reach significance.

These results suggest that the relevance of the comparison domain to the partner may play a role in determining how individuals feel about their partner and how they feel overall following comparisons: Participants indicated more positive perceptions of their partner and more positive overall affect following upward comparisons to the extent that they believed the domain was important to their partner; this association was weaker or absent following downward comparisons. However, the self-relevance of the domain did not appear to play a role in determining responses to comparisons. Participants reported experiencing more positive affective responses and viewing their partner and relationship more positively following upward than downward comparisons regardless of how self-relevant they perceived the comparison domain to be. This suggests that the positive impact of upward comparisons in romantic relationships is not simply the result of basking in the partner's reflected glory; such a "reflection" effect should occur only in domains low in self-relevance (Tesser, 1988). The finding that participants report feeling better after upward than after downward comparisons, even in domains that are important to the self, suggests that in intimate relationships, one's close connection to the partner may lead to positive affect following an upward comparison even if one's self-evaluations are threatened in a self-relevant domain.

Relationship closeness. Consistent with Study 1b, relationship closeness was not a significant predictor of comparison direction ($\beta = -.03, p = .82$). In addition, there were no main effects of relationship closeness or interactions with relationship closeness for self-evaluations in response to the comparison (all $ps > .50$). There were significant main effects of relationship closeness on evaluations of the partner ($\beta = .39, p = .008$), evaluations of the relationship ($\beta = .53, p = .002$), and overall affect ($\beta = .37, p = .04$). These main effects indicated that participants higher in closeness evaluated their partner more positively than did those lower in closeness, evaluated their relationship more positively than did those lower in closeness, and experienced more positive overall affect than did those lower in closeness, respectively. Thus, as in Study 1a, individuals higher in closeness experience social comparisons to their partner positively, regardless of direction. There were no significant interactions with relationship closeness for any of these dependent variables (all $ps > .37$). Finally, there were no main effects of relationship closeness and no interactions with relationship closeness for any of the relevance variables.

It is possible that other measures of relationship closeness, such as the Inclusion of Other in the Self Scale (Aron, Aron, & Smollan, 1992), would tap closeness more precisely than the measure used throughout the current studies, such that closeness would moderate responses to comparisons as we had predicted. Alternatively, as

the results of Studies 1a and 3 suggest, closeness may be associated with more positive responses to either upward or downward comparisons. Highly close individuals may see comparisons as a means of maintaining and enhancing their relationship, regardless of whether the self or the partner fared better. Upward comparisons may be an opportunity for individuals to bolster their idealized image of the partner; downward comparisons may provide a rewarding opportunity to help the partner, by offering support and comfort.

General Discussion

This set of studies provides the first evidence regarding the nature, frequency, and impact of everyday comparisons between relationship partners. Individuals reported comparing themselves to their spouse on a daily basis, suggesting that social comparisons between spouses may be at least as common as comparisons with friends and acquaintances (Wheeler & Miyake, 1992). Moreover, these studies provide strong evidence that individuals experience more positive affect following upward than downward comparisons when comparing themselves to their partner.

Past experience-sampling studies suggest that individuals typically feel worse after upward than after downward comparisons (Locke, 2003; Wheeler & Miyake, 1992); they are happiest when they are superior to their friends and acquaintances. Because individuals share the perspectives and resources of their romantic partner, however, comparisons in the context of intimate relationships appear to function somewhat differently. Indeed, the results of Studies 1b and 2 suggest that individuals empathize with an outstanding spouse and are therefore able to enjoy the partner's success. Individuals share the negative outcome of an unsuccessful spouse and thus are negatively affected by the partner's poor performance. These studies thus provide important evidence consistent with past laboratory studies showing that comparisons between highly close individuals function differently than do comparisons between friends or strangers (Beach et al., 1998; Lockwood et al., 2004; McFarland et al., 2001). Moreover, whereas past studies have suggested that such comparisons will lead to attenuated contrast effects rather than actual assimilation (Beach et al., 1998) or that upward comparisons will boost self-perceptions only when the comparison is not explicit (McFarland et al., 2001), our findings suggest that individuals actually feel better following upward than downward comparisons, even when the comparison is made explicitly. By highlighting the role that empathy and shared outcomes play in these comparison responses, these studies also provide key evidence as to why comparisons between partners differ from those between friends and acquaintances. Indeed, Study 2 provides direct evidence that participants report more empathy in response to comparisons with a partner than with a friend, and also provides evidence that individuals will experience more shared fate responses to comparisons in domains in which they are especially likely to share resources with their partner. Finally, this research provides important new evidence regarding predicted behavioral reactions to comparisons, indicating that individuals may try to close gaps between their own and their partner's performance either by trying to improve to the level of a more successful partner or by offering assistance to a less successful partner.

Consistent with past research (e.g., Lockwood et al., 2004), we found that participants higher in closeness responded more positively to upward comparisons than did those lower in closeness. Past studies found that individuals higher in closeness appeared to buffer themselves from the potentially negative impact of a superior partner by affirming their relationship, enhancing their own and their partner's relationship-relevant qualities (Lockwood et al., 2004; Studies 3 and 4). In the present research, we found that although participants reported that upward comparisons threatened their self-evaluations, such comparisons nevertheless made them feel better about their partner and their relationship, giving them an affective boost. It appears that focusing on the benefits of the comparison for one's partner and one's relationship, such that one empathizes with the partner's success, takes the self-evaluative sting out of being outperformed by the partner. In future research, it will be useful to explore in greater detail whether high-closeness individuals actively recruit their relationship to counter the negative affective consequences of the self-evaluative threat (Lockwood et al., 2004) or whether the negative affective consequences of the threat to self-evaluations are simply outweighed by the positive affect arising from individuals' focus on the benefits of the comparison to the partner and the relationship, a less motivated process.

Contrary to our expectations, we found no evidence for an interaction of comparison direction with closeness in Studies 1a and 1b or Study 3. In past studies, participants higher in closeness responded more positively to upward but not downward comparisons (e.g., Lockwood et al., 2004); in the present research, in contrast, closeness predicted more positive responses to both upward and downward comparisons. These studies differed, however, in the outcome variable assessed. Past experimental studies (Lockwood et al., 2004, Studies 3 and 4) examined self-affirmational responses as a possible outcome of comparisons, assessing relationship-relevant self-appraisals as the outcome measure. The present studies instead examined affect as the primary outcome measure. It may be that following a downward comparison, individuals do not experience any boost to their relationship-relevant self-appraisals because they have no need to self-affirm in situations in which their self-evaluations have been boosted. However, although individuals may not feel a need to self-affirm, those higher in closeness may nevertheless experience an affective boost because the downward comparison offers them an opportunity to provide support and comfort to their partner. The finding that higher closeness individuals experienced the most positive affective responses to both upward and downward comparisons suggests that they may be especially adept at construing comparisons to the partner in positive ways.

Although we did not find that closeness interacted with comparison direction, we note that other relationship variables may influence the extent to which individuals respond more positively to a superior than to an inferior relationship partner. For example, it may be the level of commitment (Agnew, Van Lange, Rusbult, & Langston, 1998; Gagné & Lydon, 2001, 2003; Rusbult, 1980, 1983) to a partner that determines shared fate comparison outcomes. Individuals may perceive a benefit from a high-achieving partner and a cost to a low-achieving partner only when they view themselves as inextricably bound to the partner. Alternatively, responses to comparisons with the partner may be moderated by relationship satisfaction. It may be that upward comparisons are

more rewarding than downward comparisons only for individuals who are highly satisfied with their relationship. These individuals may be most likely to highlight the positive aspects of the comparison by focusing on their partner's strengths rather than their own weaknesses.

Another variable that may play a key role in determining shared fate responses is the extent to which one's relationship is characterized by communal or exchange norms. In communal relationships, partners give benefits without expectation of reciprocity (Clark & Mills, 1979, 1993; Mills & Clark, 1982), and individuals high in communal orientation are likely to both behave in a communal manner and expect others to respond in a communal manner (Clark et al., 1987). Individuals in a romantic relationship who repeatedly benefit from their partner's successes (i.e., make upward comparisons) might be especially likely to respond positively. The weaker the communal strength of the relationship, the less likely individuals are to invoke the communal norm (Clark & Mills, 1993; Mills & Clark, 1982; Mills et al., 2004); instead, an exchange norm of giving benefits in return for receipt of benefits might be more likely to be invoked. Thus, repeatedly giving a boost to one's low-achieving partner (i.e., making downward comparisons) without receiving any benefits may lead to negative affect for such individuals.

These studies also provide important data on the domains in which individuals are most likely to compare themselves to their relationship partner. Across Studies 1a, 1b, and 3, participants were especially likely to make comparisons in social/interpersonal domains and in child-care/housework domains. Given that these are domains in which romantic partners likely experience high levels of interdependence, it is not surprising that such comparisons would be especially frequent. Comparisons on personality were relatively frequent across studies, suggesting that individuals often note how their traits compare to those of their partner. Finally, comparisons on physical appearance were infrequent, suggesting that individuals do not generally compare their looks to those of their romantic partner.

In these studies, we sought participants' reports of how comparisons to their partner influenced them in day-to-day life. However, because these data are based on self-reports, it may be that participants' responses do not reflect their actual experiences. For example, participants may be selectively describing only those upward comparisons that had a positive impact on themselves. They may have ignored more threatening comparisons to a superior partner because they did not wish to admit that they were distressed by their partner's success. Alternatively, they may have simply thought more about and therefore reported more upward comparisons that resulted in positive outcomes. However, we note that participants' responses to upward comparisons were not uniformly positive, making this possibility unlikely. In Studies 1b and 3, although participants reported that upward comparisons had a positive impact on their affect, they also noted that these comparisons had a negative impact on their self-evaluations. Thus, responses were more complex than a simple positive reaction to a superior partner. In addition, we note that although individuals might have felt that it was socially undesirable to report that upward comparisons made them feel badly, this has not been the case in past experience-sampling studies, in which individuals have overwhelmingly reported that upward comparisons made them feel worse than downward comparisons. Moreover, if par-

ticipants were highly concerned about self-presentation, it seems unlikely that they would have so readily discussed their negative reactions toward their partner following downward comparisons. Participants in Study 1b were very willing to note their frustration with a poorly performing partner, which suggests that they were not simply trying to portray themselves to the experimenter as a happily married couple. Although it seems unlikely that our effects are due solely to the self-presentational concerns of participants, we note that our reliance on self-report is a limitation of these studies; it will be useful in the future to conduct experimental research to further examine the impact of intrarerelationship comparisons.

In our studies, we focused on global affective reactions to comparisons with relationship partners. We note, however, that such comparisons might lead to complex affective responses involving mixed emotions. Indeed, comparisons have the potential to evoke a wide range of emotions, including inspiration, envy, sympathy, pride, admiration, optimism, depression, shame, resentment, pity, fear, worry, vulnerability, contempt, scorn, and *schadenfreude* (Smith, 2000). After a comparison to a superior partner, for example, one may feel happy for the partner, proud of the partner's achievements, inspired to improve one's own performance, guilty about or ashamed of one's own less stellar performance, and possibly even hurt or angry with the partner for highlighting one's own relative inferiority. Our studies suggest that in intimate relationships, pleasure and pride may be the strongest emotions elicited by this comparison, resulting in an overall positive affective response. Nevertheless, it seems likely that a highly complex constellation of emotions is activated by comparisons to a partner. The relative strength of these various emotions may be determined in part by the state of the relationship at the time of the comparison. For couples high in relationship satisfaction, pleasure and pride may be the strongest emotions elicited by upward comparisons to the partner. In less functional relationships or in situations of high stress, guilt or even anger may prevail. In future research, it will be useful to examine a greater range of relationship variables to assess affective responses to comparisons.

It will also be useful to examine the impact of intrarerelationship comparisons over the longer term. It may be that individuals who habitually make more upward than downward comparisons to their partner will experience a boost to their relationship satisfaction over time. These individuals may draw pleasure and strength from the partner's successes and may be motivated to improve their own skills, abilities, and contributions to the relationship. Individuals who make more frequent downward comparisons, in contrast, may over time come to feel that their partner is letting them down, and may feel aggrieved with the partner for failing to try hard enough to improve. Thus, frequent downward relative to upward comparisons may be a source of future relationship conflict.

We also note that it will be important to examine self-esteem as a possible moderator of comparison responses over time. To the extent that one makes repeated upward comparisons to a partner but only a handful of downward comparisons, one may gradually come to view the partner as "out of one's league." Low self-esteem individuals may be especially vulnerable to the resulting feelings of inferiority and come to feel less secure in the partner's regard (Murray et al., 2005). In future research, it will be important to examine whether self-esteem determines the impact of compar-

isons on felt security and relationship satisfaction over the longer term.

The present research focused on demonstrating that in the context of a romantic relationship, individuals may experience more positive affective responses to upward than to downward comparisons. We note that individuals may respond similarly in any relationship in which there is a high degree of empathy and/or shared fate with the comparison other. For example, parents may empathize with their offspring to a high degree and experience pleasure when their daughters or sons achieve success that outstrips their own. Friends may, in some domains, share outcomes with each other, leading to more positive outcomes following upward comparisons. In Study 2, for example, participants reported experiencing benefits from having an interpersonally skilled friend; it may be that under such circumstances, individuals will be positively affected by a friend who outperforms them socially.

In their analysis of comparisons in relationships, Beach et al. (1996) argued that in many cases, comparisons within relationships will simply be avoided. Individuals will form a "performance ecology," in which each partner adopts certain domains as his or her strengths. To the extent that one partner has taken on cooking skills as his or her domain, for example, the other partner may spend little time working in this domain, reducing the likelihood that a comparison will take place. Moreover, if a comparison does occur, the outcome should pose little distress because the inferior individual will have ceded expertise in that domain to the partner. Performance ecologies are undoubtedly important in managing comparisons within relationships. Nevertheless, it is likely that individuals will continue to face some comparisons in domains that are important, at least to some degree, to each partner. Many spouses share occupational interests, and although career success may be somewhat more important to one spouse than to the other, it is likely that career achievement will continue to be at least somewhat self-relevant to both partners. Similarly, in couples with children, spouses may each like to believe that they are good parents and may be unwilling to cede parental expertise to the other partner.

Thus, individuals may continue to make comparisons in domains that are self-relevant to both partners. Our studies suggest that such a state of affairs will not necessarily pose a problem: When one finds oneself in a position of inferiority, one may feel proud of the partner, and one may also work hard to boost one's own skills. When one finds oneself in a position of superiority, one may feel frustrated with the partner, but one may respond by offering support, encouragement, and assistance to the partner to help him or her improve. The net outcome may be one in which both partners strive for a comfortable equilibrium, helping and supporting each other to achieve the best possible outcome.

References

- Agnew, C. R., Van Lange, P. A. M., Rusbult, C. E., & Langston, C. A. (1998). Cognitive interdependence: Commitment and the mental representation of close relationships. *Journal of Personality and Social Psychology, 74*, 939-954.
- Aron, A., & Aron, E. N. (1986). *Love and the expansion of self: Understanding attraction and satisfaction*. New York: Hemisphere/Harper & Row.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self

- Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 596–612.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in self. *Journal of Personality and Social Psychology*, 60, 241–253.
- Aron, A., Mashek, D., & Aron, E. N. (2004). Closeness as including other in the self. In D. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 27–41). Mahwah, NJ: Erlbaum.
- Aron, A., Mashek, D., McLaughlin-Volpe, T., Wright, S., Lewandowski, G., & Aron, E. N. (2005). Including close others in the cognitive structure of the self. In M. W. Baldwin (Ed.), *Interpersonal cognition* (pp. 206–232). New York: Guilford Press.
- Beach, S. R. H., & Tesser, A. (1993). Decision making power and marital satisfaction: A self-evaluation maintenance perspective. *Journal of Social and Clinical Psychology*, 12, 471–494.
- 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.
- Beach, S. R. H., Tesser, A., Mendolia, M., Anderson, P., Crelia, R., Whitaker, D., & Fincham, F. D. (1996). Self-evaluation maintenance in marriage: Toward a performance ecology of the marital relationship. *Journal of Family Psychology*, 10, 379–396.
- Bradbury, T. N., & Fincham, F. D. (1990). Attributions in marriage: Review and critique. *Psychological Bulletin*, 107, 3–23.
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, 37, 12–24.
- Clark, M. S., & Mills, J. (1993). The difference between communal and exchange relationships: What it is and is not. *Personality and Social Psychology Bulletin*, 19, 684–691.
- Clark, M. S., Ouellette, R., Powell, M. C., & Milberg, S. (1987). Recipient's mood, relationship type, and helping. *Journal of Personality and Social Psychology*, 53, 94–103.
- Gagné, F. M., & Lydon, J. E. (2001). Mindset and relationship illusions: The moderating effects of domain specificity and relationship commitment. *Personality and Social Psychology Bulletin*, 27, 1144–1155.
- Gagné, F. M., & Lydon, J. E. (2003). Identification and the commitment shift: Accounting for gender differences in relationship illusions. *Personality and Social Psychology Bulletin*, 29, 907–919.
- Kenny, D. A., & Kashy, D. A. (1991). Analyzing interdependence in dyads. In B. M. Montgomery & S. Duck (Eds.), *Studying interpersonal interaction*. Guilford Communication Series (pp. 275–285). New York: Guilford Press.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York: Guilford Press.
- Locke, K. D. (2003). Status and solidarity in social comparison: Agentic and communal values and vertical and horizontal directions. *Journal of Personality and Social Psychology*, 84, 619–631.
- Locke, K. D., & Nekich, J. C. (2000). Agency and communion in naturalistic social comparison. *Personality and Social Psychology Bulletin*, 26, 864–874.
- Lockwood, P., Dolderman, D., Sadler, P., & Gerchak, E. (2004). Feeling better about doing worse: Social comparisons within romantic relationships. *Journal of Personality and Social Psychology*, 87, 80–95.
- Lydon, J. E., Meana, M., Sepinwall, D., Richards, N., & Mayman, S. (1999). The commitment calibration hypothesis: When do people devalue attractive alternatives? *Personality and Social Psychology Bulletin*, 25, 152–161.
- Major, B., Testa, M., & Bylsma, W. H. (1991). Responses to upward and downward social comparisons: The impact of esteem-relevance and perceived control. In J. Suls & T. A. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 237–260). Hillsdale, NJ: Erlbaum.
- McFarland, C., Buehler, R., & MacKay, L. (2001). Affective responses to social comparisons with extremely close others. *Social Cognition*, 19, 547–586.
- Mills, J., & Clark, M. S. (1982). Communal and exchange relationships. *Review of Personality and Social Psychology*, 3, 121–144.
- Mills, J., Clark, M. S., Ford, T. E., & Johnson, M. (2004). Measurement of communal strength. *Personal Relationships*, 11, 213–230.
- Morse, S., & Gergen, K. J. (1970). Social comparison, self-consistency, and the concept of self. *Journal of Personality and Social Psychology*, 16, 148–156.
- Murray, S. L. (1999). The quest for conviction: Motivated cognition in romantic relationships. *Psychological Inquiry*, 10, 23–34.
- Murray, S. L., & Holmes, J. G. (1993). Seeing virtues in faults: Negativity and the transformation of interpersonal narratives in close relationships. *Journal of Personality and Social Psychology*, 65, 707–722.
- Murray, S. L., & Holmes, J. G. (1994). Storytelling in close relationships: The construction of confidence. *Personality and Social Psychology Bulletin*, 20, 663–676.
- Murray, S. L., & Holmes, J. G. (1999). The (mental) ties that bind: Cognitive structures that predict relationship resilience. *Journal of Personality and Social Psychology*, 77, 1228–1244.
- Murray, S. L., Holmes, J. G., Bellavia, G., Griffin, D. W., & Dolderman, D. (2002). Kindred spirits? The benefits of egocentrism in close relationships. *Journal of Personality and Social Psychology*, 82, 563–581.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology*, 70, 79–98.
- Murray, S. L., Rose, P., Bellavia, G. M., Holmes, J. G., & Kusche, A. G. (2002). When rejection stings: How self-esteem constrains relationship-enhancement processes. *Journal of Personality and Social Psychology*, 83, 556–573.
- Murray, S. L., Rose, P., Holmes, J. G., Derrick, J., Podchaski, E. J., Bellavia, G., & Griffin, D. W. (2005). Putting the partner within reach: A dyadic perspective on felt security in close relationships. *Journal of Personality and Social Psychology*, 88, 327–347.
- Nezlek, J. B. (2001). Multilevel random coefficient analyses of event- and interval-contingent data in social and personality psychology research. *Personality and Social Psychology Bulletin*, 27, 771–785.
- Olson, B. D., & Evans, D. L. (1999). The role of the Big Five personality dimensions in the direction and affective consequences of everyday social comparisons. *Personality and Social Psychology Bulletin*, 25, 1498–1508.
- Overall, N. C., Fletcher, G. J. O., & Simpson, J. A. (2006). Regulation processes in intimate relationships: The role of ideal standards. *Journal of Personality and Social Psychology*, 91, 662–685.
- Patrick, H., Neighbors, C., & Knee, C. R. (2004). Appearance-related social comparisons: The role of contingent self-esteem and self-perceptions of attractiveness. *Personality and Social Psychology Bulletin*, 30, 501–514.
- Pleban, R., & Tesser, A. (1981). The effects of relevance and quality of another's performance on interpersonal closeness. *Social Psychology Quarterly*, 44, 278–285.
- Rasbash, J., Browne, W., Healy, M., Cameron, B., & Charlton, C. (2005). MLwiN Version 2.02 [Computer software]. Bristol, England: Centre for Multilevel Modelling.
- Rasbash, J., Steele, F., Browne, W. J., & Prosser, B. (2005). *A user's guide to MLwiN Version 2.0*. Bristol, England: Centre for Multilevel Modelling.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Raudenbush, S., Bryk, A., & Congdon, R. (2005). HLM 6.02 for Windows

- [Computer software]. Lincolnwood, IL: Scientific Software International.
- Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Experimental Social Psychology, 16*, 172–186.
- Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology, 45*, 101–117.
- Rusbult, C. E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, I. (1991). Accommodation processes in close relationships: Theory and preliminary research evidence. *Journal of Personality and Social Psychology, 60*, 53–78.
- Scinta, A., & Gable, S. L. (2005). Performance comparisons and attachment: An investigation of competitive responses in close relationships. *Personal Relationships, 12*, 357–372.
- Selznick, D. O. (Producer), & Wellman, W. A. (Director). (1937). *A star is born* [Motion picture]. United States: United Artists.
- Simpson, J. A., Ickes, W., & Blackstone, T. (1995). When the head protects the heart: Empathic accuracy in dating relationships. *Journal of Personality and Social Psychology, 69*, 629–641.
- Smith, R. H. (2000). Assimilative and contrastive emotional reactions to upward and downward social comparisons. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison: Theory and research* (pp. 173–200). New York: Kluwer Academic/Plenum.
- Snijders, T. A. B., & Bosker, R. J. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. London: Sage.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 181–227). New York: Academic Press.
- Tesser, A., Millar, M., & Moore, J. (1988). Some affective consequences of social comparison and reflection processes: The pain and pleasure of being close. *Journal of Personality and Social Psychology, 54*, 49–61.
- Tesser, A., & Smith, J. (1980). Some effects of task relevance and friendship on helping: You don't always help the one you like. *Journal of Experimental Social Psychology, 16*, 582–590.
- Wheeler, L., & Miyake, K. (1992). Social comparison in everyday life. *Journal of Personality and Social Psychology, 62*, 760–773.
- Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin, 106*, 231–248.
- Wood, J. V., Michela, J. L., & Giordano, C. (2000). Downward comparison in everyday life: Reconciling self-enhancement models with the mood-cognition priming model. *Journal of Personality and Social Psychology, 79*, 563–579.

Received December 8, 2006

Revision received March 6, 2008

Accepted March 6, 2008 ■