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# Culture and Positive Illusions in Close Relationships: How My Relationships Are Better Than Yours

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*Although routinely observed among North Americans, self-enhancing biases have been elusive in studies conducted with Japanese. The authors conducted two studies of relationship-serving biases (RSBs) with Japanese, Asian Canadian, and European Canadian participants. In both studies, members of all three cultural groups viewed their own relationships (with their best friend, their closest family member, and their romantic partner) as more positive than those of their peers, and to roughly the same extent. Of importance, however, (a) RSBs were largely uncorrelated with both self-esteem and self-serving biases and (b) Japanese (but not the other two cultural groups') RSBs were paralleled by tendencies to view their relationship partners more positively than themselves. The authors suggest that relationship enhancement serves a different function than self-enhancement, aiding the individual's quest for connection and belongingness with others.*

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**O**ne of the most robust findings in social psychology is that Westerners tend to view themselves in unrealistically positive terms. That is, frequently they distort their perceptions of themselves and their social worlds such that they appear better, more in control, and more likely to have a positive future than their peers (e.g., Heine & Lehman, 1995; Taylor & Brown, 1988). For example, 94% of U.S. professors think they are better than their average colleague (Cross, 1977), Canadian university students think they are less than half as likely to drop out of school as their peers (Heine, 1993), only 1% of Australian workers rate their job performance as below average (Headey & Wearing, 1987), and Americans think others are 3 times more likely than they are to lie (Rosenblatt, 1993). Indeed, it is difficult to locate a domain of self-evaluation in which Westerners do not view them-

selves in unrealistically positive terms (for reviews, see Blaine & Crocker, 1993; Greenwald, 1980; Taylor & Brown, 1988). The proportions of the population that exhibit these positively biased distortions vary considerably depending both on the experimental paradigm and the traits under question (e.g., John & Robins, 1994). Moreover, currently there is a heated and important debate about the advantages and downsides associated with such biases (Colvin & Block, 1994; Colvin, Block, & Funder, 1995; Paulhus, 1998; Taylor & Brown, 1988, 1994). We think it is fair to say, however, that the literature reveals pronounced self-enhancing tendencies among Westerners.

In contrast to the glowing ways in which Westerners are inclined to view themselves, studies with Asians (particularly Japanese) have revealed scant evidence for such biases. Whereas North Americans tend to think, on average, that less than 30% of the population is better than they are with respect to various traits, Japanese estimates approach 50%, roughly the proportion expected if par-

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ticipants hold accurate self-assessments (Heine & Lehman, 1997a; Markus & Kitayama, 1991a). Moreover, this lack of self-enhancing bias has been found to generalize to situations in which Japanese evaluate themselves on the traits that they view as most important for succeeding in their culture (Heine & Lehman, 1999). Although self-serving attributional biases, whereby people claim credit for their successes yet place blame outside of the self for their failures, consistently emerge among North Americans (see Zuckerman, 1979, for a review), more than a dozen studies have failed to replicate this pattern in Japan (Meijer & Semin, 1998; for a review, see Kitayama, Takagi, & Matsumoto, 1995). North Americans also exhibit pronounced unrealistic optimism, believing that their futures will be more positive than those of their peers, yet Japanese exhibit far less of this bias and in some cases are unrealistically pessimistic (Heine & Lehman, 1995). Furthermore, pronounced cultural differences in positively biased ways of thinking also are evident when participants evaluate their groups (Heine & Lehman, 1997a). These cultural differences in self- and group-enhancing biases have been highly significant, and there is no evidence thus far that the differences can be accounted for by response styles or by differences in self-presentational norms (for a review, see Heine, Lehman, Markus, & Kitayama, 1999). As well, several studies have revealed that Japanese often exhibit biases in the opposite direction, demonstrating significant self-effacement (e.g., Heine & Lehman, 1999; Heine, Takata, & Lehman, 2000; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). Differences in positive views of the self also are evident in cross-cultural comparisons of self-esteem (e.g., Bond & Cheung, 1983; Mahler, 1976; Yeh, 1995) and in tendencies to strive to maintain a positive self-view (e.g., Heine, Kitayama, & Lehman, in press; Heine & Lehman, 1997b). Indeed, the very phenomenon of self-enhancement, at least as it has been conventionally measured in social psychology, has been elusive among Japanese samples (Heine et al., 1999). This lack of self-enhancement also is evident among people from other East Asian cultures (Chandler, Shama, Wolf, & Planchard, 1981; Yik, Bond, & Paulhus, 1998), although the extent to which this pattern generalizes to other collectivistic cultures has not yet been clearly assessed.

We maintain that these cultural differences in positive self-views reflect a reluctance by Japanese to view themselves in positive terms. Such a hesitance has been discussed within the context of self-improvement (Fiske, Kitayama, Markus, & Nisbett, 1997; Heine et al., 1999; Kitayama et al., 1997). Theoretical development in the area of self-improvement has spotlighted the notion that individuals (particularly those with an interdependent view of self) are motivated to secure the approval of oth-

ers. The potential for this approval to be jeopardized increases if the individual does not live up to the relevant standards of performance held by others. Consequently, the argument continues that Japanese, by dint of their cultural upbringing, are vigilant about their shortcomings with respect to consensually shared standards and work toward correcting these deficiencies. We suggest that Japanese are supported and encouraged to live up to the standards necessary to gain (or to retain) others' approval.

Until now, such a self-critical orientation has been investigated exclusively with Japanese participants' evaluations of aspects that reflect their inner attributes, for example, their (or their groups') traits and abilities. As Markus and Kitayama (1991b) describe, such inner attributes are less self-defining for the interdependent self (which tends to be more predominant in Japan) than the independent self (which tends to be more predominant in Western cultures). One's relationships with significant others, however, represent key self-defining components for the interdependent self. It may well be the case, therefore, that Japanese enhance by viewing their relationships in unrealistically positive terms: as closer, better, and more supportive than the relationships of their peers.

Indeed, past work by Endo (1997) indicates that Japanese may exhibit relationship enhancement. She reported that Japanese university students rated their relationships with their best friends as closer than the best friendships of their classmates, and Japanese married couples rated their marriages as better than those of their peers. Moreover, within this Japanese sample, Endo found that satisfaction with marriage predicted life satisfaction better than did self-esteem. Similarly, Kwan, Bond, and Singelis (1997) have proposed that relationship harmony is an important characteristic for Hong Kong Chinese, predicting life satisfaction better for Chinese than for Americans. Also, trait interdependence was more closely tied to relationship harmony, whereas trait independence was more closely tied to global self-esteem. Viewing one's relationships positively thus may be particularly important for people from collectivist cultures, and perhaps this motivation is an interdependent analog to Westerners' tendencies to view themselves in positive terms.

At the same time, it makes little sense to assume that the tendency to enhance one's relationships is confined to people from Asian cultures. Indeed, Westerners also have been found to exhibit unrealistically positive views of their relationships, at least for relationships with their romantic partners. For example, the Dutch view their marital relationships as more equitable than those of their peers (Buunk & Van Yperen, 1991); American and Dutch students report that their dating relationships

have more positive and fewer negative characteristics than those of others (Van Lange & Rusbult, 1995); and Murray, Holmes, and Griffin (1996a, 1996b) found that Canadians tend to view their dating partners and spouses in unrealistically positive terms and that the success of their relationships hinges on these positive illusions. Clearly, then, in terms of romantic relationships, relationship enhancement is not foreign to Westerners. It might be the case, however, that these biases, because of their critical role in romantic love for Westerners, are especially pronounced in that realm (cf. Murray et al., 1996a, 1996b). Similar distortions may be less likely for other kinds of relationships that are less exclusive, such as friendships and family relationships. To assess their generalizability, we investigated relationship enhancement for relationships involving friends, family members, and romantic partners.

That relationships are viewed as more self-defining among Asians than among Westerners (Markus & Kitayama, 1991b) raises the possibility that relationship enhancement may be more pronounced among Asians than among Westerners. The enhanced feelings of belongingness that relationship enhancement is hypothesized to provide may be more important to those with interdependent views of self, and thus they may exhibit more evidence of relationship enhancement. Alternatively, that Westerners exhibit more distorted self-enhancing cognitions than Asians in virtually every domain which has been investigated in published cross-cultural studies thus far (see Heine et al., 1999, for a review), suggests that Westerners, here too, will exhibit more positively biased distortions than Asians. Evidence in line with this latter possibility is provided by Kwan et al. (1997), who found that Hong Kong Chinese reported significantly lower levels of relationship harmony than did Americans. In Study 1, we compared relationship enhancement between Asian (Japanese) and Western (Canadian) samples.

## STUDY 1

### *Method*

#### *PARTICIPANTS*

The Japanese sample came from an introductory psychology class at Nara University. Participants included 173 students (61 women and 112 men) who completed the questionnaire packet near the beginning of the term in class.

The Canadian samples came from an introductory social-personality psychology class at the University of British Columbia (UBC). A total of 226 participants completed the questionnaire at the beginning of the course. Given the cultural diversity at UBC and to examine further cultural differences, the Canadian sample was parti-

tioned by participants' ethnic background: 124 Canadians (87 women and 37 men) identified themselves as being of Asian descent and formed the Asian Canadian sample, 76 Canadians (53 women and 23 men) identified themselves as being of European descent and formed the European Canadian sample, and the remaining 26 Canadians were of a variety of ethnic backgrounds and were not included in the analyses.

#### *MATERIALS*

The first part of the questionnaire packet included a measure of global self-esteem (Rosenberg, 1965) and some other trait measures that are not the focus of the current investigation. Participants then completed the relationship-serving bias (RSB) measures. Participants were asked a number of questions with respect to three different relationship partners: their best friend, their closest family member, and their romantic partner, in that order. Participants who were not currently in a romantic relationship were asked to answer that subset of the questionnaire with respect to the person whom they imagined their next romantic relationship would be like. This was done so that participants' romantic status would not be made salient in the classroom by how soon they handed in their questionnaire. The following questions were asked with respect to participants' relationships:

*Evaluations of own relationships.* Participants first were asked to evaluate the quality of their relationships by indicating how accurate the following five statements were for their relationships on a Likert scale ranging from (1) *not at all accurate* to (6) *extremely accurate*. (a) My relationship with my \_\_\_\_\_ (this and the following blanks were filled with either "best friend," "closest family member," or "romantic partner") is very close, (b) My \_\_\_\_\_ and I are very understanding of each other, (c) The relationship with my \_\_\_\_\_ is very important to me, (d) My \_\_\_\_\_ and I are very supportive of each other; and (e) My \_\_\_\_\_ and I enjoy being together very much. This set of questions was repeated for each of the three kinds of relationships.

*Evaluations of relationships for the average other.* Later in the questionnaire, participants evaluated the quality of relationships for the average student from their university, same sex as themselves, using the same 6-point Likert scale. The questions were identical to those of one's own relationship evaluation above, with the phrase "my relationship with my \_\_\_\_\_ is" replaced with "The average Nara/UBC student's relationship with his or her \_\_\_\_\_ is" for each of the five questions asked above and for each of the three relationship types.

*Evaluations of relationship partners.* Participants also evaluated each of their three relationship partners with

respect to five traits relevant to relationship success using the same 6-point Likert scale: (a) My \_\_\_\_\_ is very considerate, (b) My \_\_\_\_\_ is very understanding, (c) My \_\_\_\_\_ is very trustworthy, (d) My \_\_\_\_\_ is very supportive, and (e) My \_\_\_\_\_ is very interesting.

*Self-evaluations.* Later in the questionnaire, participants were asked to evaluate themselves with respect to the five traits relevant to relationship success in an identical manner to the way they evaluated their partners above, replacing the phrase "My \_\_\_\_\_ is" with "I am."

In the last part of the questionnaire, participants completed some demographic items. The Canadian version of the questionnaire was in English and the Japanese version was in Japanese. The self-esteem measure was originally developed in English by Rosenberg (1965), whereas the RSB measures were adapted from ones developed by Endo (1997) in Japanese. All of the measures were translated into the other language and items that were difficult to translate were identified. Three bilingual translators discussed these problematic instances and came up with consensually agreed-on solutions.

### *Results and Discussion*

#### *COMPARABILITY OF SAMPLES*

The three samples differed in terms of their average age,  $F(2, 370) = 39.78, p < .001$ . Post hoc comparisons (Tukey's HSD for unequal *ns*) revealed that the Japanese sample ( $M = 20.9$  years) was older than both the European Canadian ( $M = 19.9$ ) and Asian Canadian ( $M = 19.5$ ) samples. However, correlations between age and each of the dependent variables were significant only in a few select instances within each cultural group, and these did not form a consistent pattern across cultural groups. Age was thus not included as a covariate in the analyses reported below. The sex proportions differed significantly between cultures,  $\chi^2(2, N = 370) = 45.1, p < .001$ . Sex was included as a factor in all analyses. Given our primary interest in cultural differences, we discuss effects for sex only when they reach conventional levels of significance.

#### *COMPARISONS OF RELATIONSHIP VARIABLES*

We first analyzed the individual components of RSBs (evaluation of one's own relationships, evaluation of one's perception of the average other's relationships, and the difference between the two). Reliability analyses were conducted for each component, for each of the three relationship types, within each of the three cultures. Cronbach's alphas ranged from .79 to .94 (average = .89). Given these high alphas, subsequent analyses were conducted on a composite variable formed by averaging the five relationship qualities.

Between-culture analyses of evaluations of (a) own relationships and (b) other's relationships revealed a few cultural differences (see Table 1). Japanese evaluated their own best friendships as significantly less positive than did either group of Canadians,  $F(2, 366) = 9.59, p < .001$ . A significant main effect for sex also emerged,  $F(1, 366) = 14.72, p < .001$ , with women ( $M = 5.27$ ) rating their best friend relationships more positively than did men ( $M = 4.92$ ). Japanese also evaluated the average best friendships of their peers to be significantly less positive than did both groups of Canadians,  $F(2, 366) = 19.01, p < .001$ . Analyses of one's own closest family relationships, however, did not reveal any cultural differences,  $F(2, 367) = 1.55, ns$ , although Japanese evaluated the average closest family relationships of their peers to be significantly less positive than did Asian Canadians, with European Canadians falling in between,  $F(2, 367) = 3.21, p < .05$ . A main effect for sex also emerged, revealing that women ( $M = 4.47$ ) viewed the closest family relationships of their peers to be significantly more positive than did men ( $M = 4.22$ ),  $F(1, 367) = 5.46, p < .05$ . Last, analyses with romantic relationships did not reveal significant cultural differences for either one's own relationships,  $F(2, 147) = 3.05, p < .06$ , or one's peers' relationships,  $F(2, 147) = .75, ns$ . In sum, relative to Canadians, Japanese tended to report less close relationships with their best friends, less close relationships among their peers' best friends and closest family members, and no significant differences with respect to romantic relationships. Why Japanese view their relationships with their best friends as less close than do Canadians is not clear here but we speculate that this suggests that what determines the closeness of friendships might vary importantly across cultures.

RSBs were operationalized as the difference between participants' ratings of their own relationships and their ratings of the average same-sex student from their university. RSBs were calculated by comparing participants' other composite ratings and their own composite ratings with repeated-measures ANOVAs. For the sake of clarity, the means of the difference between the two sets of repeated measures are reported in Table 1, although all analyses were conducted with repeated-measures ANOVAs. Significant positive differences (i.e., qualities being more characteristic of one's own relationships than of others' relationships), which emerge from a given subsample, are evidence for RSBs.

Analyses were conducted separately between own relationships and others' relationships for the composites for each of the three different kinds of relationship partners (best friend, closest family member, romantic partner), with culture and sex as the independent variables. Analyses for RSBs among best friends did not reveal an effect for culture,  $F(2, 365) = 2.25, p > .10$ . A sig-

**TABLE 1: Means and Standard Deviations for Relationship Variables in Study 1**

	<i>European Canadian</i>	<i>Asian Canadian</i>	<i>Japanese</i>
Best friend relationship	5.34 <sub>a</sub> (0.67)	5.23 <sub>a</sub> (0.68)	4.79 <sub>b</sub> (0.89)
Average best friend relationship	4.82 <sub>a</sub> (0.70)	4.70 <sub>a</sub> (0.77)	4.09 <sub>b</sub> (1.01)
Best friend RSB	.52 <sub>a</sub> *** (0.76)	.53 <sub>a</sub> *** (0.76)	.69 <sub>a</sub> *** (1.03)
Family member relationship	4.78 <sub>a</sub> (0.95)	4.82 <sub>a</sub> (0.98)	4.54 <sub>a</sub> (0.96)
Average family member relationship	4.38 <sub>a,b</sub> (0.70)	4.39 <sub>a</sub> (0.80)	4.10 <sub>b</sub> (1.08)
Family member RSB	.39 <sub>a</sub> ** (1.10)	.37 <sub>a</sub> ** (1.15)	.44 <sub>a</sub> *** (1.20)
Romantic partner relationship	5.55 <sub>a</sub> (0.52)	5.54 <sub>a</sub> (0.59)	5.24 <sub>a</sub> (0.78)
Average romantic partner relationship	4.74 <sub>a</sub> (0.88)	5.00 <sub>a</sub> (0.64)	4.98 <sub>a</sub> (0.87)
Romantic partner RSB	.82 <sub>a</sub> *** (0.90)	.54 <sub>a</sub> *** (0.68)	.26 <sub>b</sub> * (1.00)

NOTE: RSB = relationship-serving biases. Standard deviations are reported in parentheses. Rows with different subscripts are significantly different from one another at  $p < .05$ .

\*RSB is significantly different from 0 at  $p < .05$ . \*\*RSB is significantly different from 0 at  $p < .01$ . \*\*\*RSB is significantly different from 0 at  $p < .001$ .

nificant Sex  $\times$  Target interaction did emerge within the Asian Canadian sample, with women ( $M = .62$ ) viewing their friendships in more unrealistically positive terms than did men ( $M = .32$ ),  $F(1, 121) = 4.02, p < .05$ . Subsequent repeated-measures analyses revealed that members from each cultural group rated their own best friend relationships significantly more positively than the best friend relationships of their peers. Japanese, then, similar to both groups of Canadians, exhibited positive distortions when evaluating their relationships with their best friends.

Similarly, analyses for RSBs among closest family members also did not reveal an effect for culture,  $F(2, 367) < 1$ . The ratings for each cultural group were significantly biased, indicating that participants viewed their relationship with their closest family member as significantly more positive than those relationships among their peers. Members from each culture, then, held unrealistically biased views of their relationships with their closest family member, and the extent of this bias did not differ between cultures.

Prior to conducting analyses for RSBs among romantic partners, the samples were split on the basis of whether participants currently were involved in a romantic relationship. Forty-five percent of the European Canadians, 36% of the Asian Canadians, and 43% of the Japanese reported that they were currently in a romantic relationship. These proportions are not significantly different from one another,  $\chi^2(2, N = 371) = 2.1, ns$ . We analyzed the data for participants who were not in a romantic relationship (regarding their imagined partners); however, because no relevant patterns emerged and because it is difficult to know what such evaluations mean, we will not discuss them.

A significant cultural difference emerged for RSBs for participants who were in actual romantic relationships,  $F(2, 147) = 3.64, p < .03$ . Post hoc analyses revealed that European Canadians viewed their relationship with

their romantic partners in significantly more unrealistically positive terms than did Japanese, whereas Asian Canadians fell in between. Each cultural group, however, viewed their relationships with their romantic partners as significantly more positive than those relationships of their peers. Members from all cultural groups, then, exhibited romantic RSBs, yet European Canadians displayed a more pronounced tendency of this than did Japanese.

In sum, across the three relationship types there is little evidence for cultural differences in relationship enhancement. This stands in contrast to the pronounced cultural differences that routinely have been observed among various measures of self-enhancement. Japanese, similar to Canadians, demonstrated pronounced positively biased views when they evaluated the quality of their significant relationships. Moreover, these biases were evident among Japanese across three different relationship types, although the magnitude of their romantic RSBs was less pronounced than it was for European Canadians. We now, finally, have some evidence of Japanese reporting unrealistically biased perceptions. Although they may not evaluate themselves in unrealistically positive terms, Japanese seem to enhance their significant relationships.

*EVALUATIONS OF SELF AND RELATIONSHIP PARTNERS*

Next, we assessed how participants evaluated themselves relative to their relationship partners. Reliability analyses of the five traits were conducted for each of the targets (self, best friend, closest family member, and romantic partner) within each of the three cultural groups. Cronbach's alphas ranged from .72 to .90 (average = .80), indicating that these five traits also were responded to similarly, and subsequent analyses were conducted on a composite variable formed by averaging across the traits.

**TABLE 2: Means and Standard Deviations for Evaluations of Self, Relationship Partners, and Self-Esteem**

	<i>European Canadian</i>		<i>Asian Canadian</i>		<i>Japanese</i>	
Self	5.18 <sub>a</sub>	(0.54)	5.05 <sub>a</sub>	(0.61)	4.45 <sub>b</sub>	(0.86)
Friend	5.22 <sub>a</sub>	(0.65)	5.14 <sub>a</sub>	(0.65)	4.84 <sub>b</sub>	(0.86)
Family member	5.09 <sub>a</sub>	(0.83)	4.88 <sub>a, b</sub>	(0.93)	4.73 <sub>b</sub>	(0.79)
Romantic partner	5.55 <sub>a</sub>	(0.52)	5.48 <sub>a</sub>	(0.55)	5.17 <sub>b</sub>	(0.60)
Self minus friend	-.04 <sub>a</sub>	(0.65)	-.09 <sub>a</sub>	(0.65)	-.39 <sub>b</sub> ***	(0.89)
Self minus family member	.09 <sub>a</sub>	(0.83)	.17 <sub>a</sub>	(0.98)	-.28 <sub>b</sub> ***	(0.88)
Self minus romantic partner	-.37 <sub>a</sub> **	(0.55)	-.43 <sub>a</sub> *	(0.62)	-.72 <sub>a</sub> ***	(0.81)
Self-esteem	38.8 <sub>a</sub>	(6.24)	38.9 <sub>a</sub>	(5.10)	31.2 <sub>b</sub>	(7.21)

NOTE: Standard deviations are reported in parentheses. Rows with different subscripts are significantly different from one another at  $p < .05$ . \*self is different from other at  $p < .05$ . \*\*self is different from other at  $p < .01$ . \*\*\*self is different from other at  $p < .001$ .

First, between-culture ANOVAs were conducted on how participants evaluated themselves, their best friends, closest family members, and romantic partners. Table 2 indicates that, regardless of the target, Japanese evaluations were significantly less positive than either group of Canadians. This suggests that Japanese are less inclined to view themselves, and the people they are connected to, as positively as are Canadians (see also Heine et al., 1999; Kitayama, Karasawa, Heine, Lehman, & Markus, 1998, for similar conclusions).

Repeated-measures ANOVAs were conducted between the composite evaluations of participants' self-evaluations and their evaluations of their partners, with culture and sex as the between-group factors. Again, for the sake of clarity, in Table 2 we present the difference scores between these repeated measures (participants' evaluations of their partners subtracted from their self-evaluations). First, analyses revealed a pronounced Culture  $\times$  Target interaction,  $F(2, 364) = 10.34$ ,  $p < .001$ . Post hoc comparisons revealed that Japanese rated their best friends more positively relative to themselves compared to either group of Canadians. Subsequent simple-effect analyses revealed that Japanese viewed their best friends significantly more positively than they did themselves on these relationship-relevant traits, whereas neither group of Canadians exhibited a significant difference between their self and their best friend ratings.

Analyses of family members revealed a similar pattern. The Culture  $\times$  Target interaction was significant,  $F(2, 364) = 8.72$ ,  $p < .001$ , and post hoc comparisons revealed that Japanese rated their closest family members relatively more positively than they did themselves compared to both groups of Canadians. Subsequent simple-effect analyses revealed that whereas both groups of Canadians did not differ in their evaluations of themselves and their family members, Japanese tended to rate their family members significantly more positively than they did themselves.

A significant Culture  $\times$  Target interaction did not emerge for romantic partners,  $F(2, 146) = 2.32$ ,  $p > .10$ . Simple-effect analyses revealed that members from all three cultural groups rated their romantic partners significantly more positively than they did themselves. Unlike friendships and family relationships for Canadians, perhaps romantic love is importantly dependent on such unrealistically positive assessments of one's partner across cultures (Murray et al., 1996a, 1996b).

In sum, Japanese consistently rated their relationship partners as possessing more of the characteristics associated with good relationships than they did themselves. In contrast, Canadians exhibited this tendency only when evaluating their romantic partners (cf. Murray et al., 1996a, 1996b). Although it is not clear whether this general pattern is the result of Japanese enhancing their partners or effacing themselves, or both, they are viewing their partners as possessing more of the qualities that lead to good relationships than themselves. Japanese may be attributing success in their relationships to their partners: individuals who are more considerate, understanding, supportive, trustworthy, and interesting than themselves.

Last, analyses of self-esteem revealed pronounced cultural differences,  $F(2, 366) = 60.23$ ,  $p < .001$ . Post hoc comparisons revealed that both groups of Canadians endorsed these items to a much greater extent than did Japanese. These results corroborate many past cross-cultural studies of self-esteem (Bond & Cheung, 1983; Heine et al., 1999; Mahler, 1976; Yeh, 1995).

#### CORRELATIONS BETWEEN SELF-ESTEEM AND OTHER VARIABLES

Correlational analyses were conducted between self-esteem and the relationship variables. For the correlations, we included the difference scores between one's own relationships and other's relationships and between self-ratings and partner ratings. Interestingly, across the three samples there was little relation between RSBs and self-esteem (see Table 3). European Canadians and Japa-

nese did not exhibit a tendency to evaluate themselves more positively (i.e., to have higher self-esteem scores) when they viewed their relationships in unrealistically positive terms. Asian Canadians who viewed their relationships with their best friends and closest family members (but not their romantic relationships) in unrealistically positive terms did tend to have higher self-esteem scores, but these relations were modest. Thus, there was remarkably little relation between self-esteem and RSBs, particularly for the European Canadian and Japanese samples.

Analyses of the two components of RSBs (own relationship evaluations and others' relationship evaluations) did not reveal consistent relations with self-esteem. Although positive evaluations of their best friend relationships were significantly related to self-esteem for all three cultural groups, the only other significant correlations were with European Canadians' peers' best friendships and Asian Canadians' own family relationships. Moreover, if Bonferroni reductions are applied, the only correlations that remain significant are the own best friend evaluations of Japanese and the own closest family relationship of Asian Canadians.

This pattern of weak associations between self-evaluations and relationship evaluations may appear at odds with some past research. For example, some research in the attachment literature has found that securely attached individuals tend to have higher self-esteem and more positive evaluations of their relationships than do less securely attached individuals (Collins & Read, 1990; Feeney & Noller, 1990), although other attachment studies have not consistently found such relations (Collins, 1996; Griffin & Bartholomew, 1994). Murray et al. (1996a) explored the correlations between self-esteem and participants' views of their romantic partners and generally found positive correlations (*r*s ranged from  $-.01$  to  $.26$ ). These results suggest that self-evaluations and relationship evaluations might have a positive association. Some other research, however, runs counter to these findings. For example, constructs such as interdependence and relationship harmony have been shown to be orthogonal to self-esteem (Heine et al., 1999; Kwan et al., 1997; Singelis, Bond, Lai, & Sharkey, 1999). That is, those people who report having the strongest sense of belongingness do not report feeling any better about their individual self-regard. In sum, the various literatures that have explored relations between relationships and self-esteem have found some evidence for a positive association, but this relation is not particularly robust and some methodologies fail to detect it. The present study is the first that we are aware of to specifically explore the links between self- and relationship evaluations (and not relationship partner evaluations), and with regard to the present samples, there is little evi-

**TABLE 3: Correlations Between Self-Esteem and Other Dependent Measures**

	<i>European Canadian</i>	<i>Asian Canadian</i>	<i>Japanese</i>
Best friend relationship	.26*	.18*	.24***
Best friend average relationship	.30**	-.04	.06
Best friend RSB	-.05	.20*	.11
Family relationship	.17	.29***	.14
Family average relationship	.16	-.02	.08
Family RSB	.05	.26**	.03
Romantic relationship <sup>a</sup>	-.11	.25	-.10
Romantic average relationship <sup>a</sup>	-.01	.21	.03
Romantic RSB <sup>a</sup>	-.06	.03	-.09
Self-evaluations	.46***	.40***	.53***
Best friend evaluations	.27*	.23*	.19*
Best friend less self	-.09	-.14	-.33***
Family member evaluations	.38**	.27**	.19*
Family member less self	.09	.00	-.31***
Romantic partner evaluations <sup>a</sup>	.11	.33**	-.11
Romantic partner less self <sup>a</sup>	-.21	-.26	-.47***

NOTE: RSB = relationship-serving bias, determined by the relationship rating minus average relationship rating.  
 a. Includes only participants who were currently involved in a romantic relationship.  
 \**r*is significant at  $p < .05$ . \*\**r*is significant at  $p < .01$ . \*\*\**r*is significant at  $p < .001$ .

dence to suggest that RSBs in family, friend, or romantic relationships function to enhance self-esteem for either European Canadians or Japanese.

Not surprisingly, the variable that was most strongly related to self-esteem across the three cultures was how individuals evaluated themselves on the five relationship-relevant traits. Positive evaluations of oneself in these domains correlated positively with overall self-esteem. There was a fairly consistent pattern in correlations with how individuals evaluated their relationship partners. Positive evaluations of one's best friend and of one's closest family member were modestly correlated with self-esteem for all three cultures, whereas positive evaluations of one's romantic partner were related to self-esteem only for Asian Canadians. In sum, aside from romantic relationships for European Canadians and Japanese, people who view their relationship partners positively tend to have higher self-esteem (cf. Murray et al., 1996a, 1996b). This indicates that people evaluate themselves and those to whom they are close in similar ways, although we find little evidence that people's evaluations of themselves and of their relationships are correlated.

Finally, unlike both groups of Canadians, Japanese consistently evaluated their relationship partners more positively than they evaluated themselves. And the more Japanese did this, the lower was their self-esteem. Perhaps the lower levels of self-esteem that Japanese tend to

exhibit (e.g., Bond & Cheung, 1983; Heine et al., 1999) are in part due to feelings that they are not as competent as their close relationship partners (at least in terms of the five traits included here).

#### LIMITATIONS OF STUDY 1

The only cultural difference in RSBs that emerged across the three relationship types in Study 1 was that Japanese exhibited significantly weaker RSBs than did European Canadians with respect to their romantic relationships. Unlike the exclusivity generally inherent in romantic partner relationships, people have many friendships and many family relationships. Study 1 forced participants to select from this relatively large number of relationships the particular friend and family member to whom they felt closest. Although people may feel certain about how their best friendships differ from their other friendships, it is plausible that they may not have as clear a sense of this for their peers (i.e., how their peers' best friendships differ from average friendships). People observe others' friendships in general but are unlikely to know when others view particular friends as their best friends. The same logic applies for one's awareness of others' closest family members. It is plausible, then, that the magnitude of RSBs for best friends and closest family members hinges, in part, on participants' difficulties imagining what their peers' best friendships and closest family relationships are like. That is, these two forms of RSBs may be artificially enhanced by the lack of information necessary to make an accurate evaluation. We designed Study 2, in part, to address this potential confound by asking participants to evaluate their friendships and family relationships in general.

Although not found in Study 1, it seems plausible that relationship enhancement is related to self-enhancement. That is, people whose self-evaluations depart from reality might be expected to exhibit similar biases when evaluating their relationships. This suggests a general inaccuracy component that may underlie both relationship enhancement and self-enhancement. Study 2 investigated this possibility by assessing both self- and relationship enhancement and their intercorrelations.

Last, relationship enhancement was operationalized in Study 1 by the difference between participants' views on the five positively valenced characteristics in terms of their own versus their peers' relationships. We selected five characteristics that we considered important for relationships, but it could have been the case that individual participants valued different qualities in their own relationships. Study 2 addresses this possibility by using an idiographic design in which participants provided their own characteristics with which to evaluate their relationships. Study 2 also asked participants to consider and then rate negative features of relationships. We did

this to assess whether RSBs generalize to aspects of relationships that participants wish to avoid.

#### STUDY 2

##### Method

##### PARTICIPANTS

The Japanese sample came from a large introductory psychology class at Kyoto University. Two hundred and twenty-two students (76 women and 146 men) completed the materials in class near the beginning of the term. Canadian participants came from a large introductory social and personality psychology class at the University of British Columbia. Two hundred and thirty-one students completed the materials in class near the beginning of the term and the sample was partitioned by cultural background as in Study 1. One hundred and eleven participants (61 women and 50 men) identified themselves of Asian descent and formed the Asian Canadian sample. Ninety-eight participants (62 women and 36 men) identified themselves of European heritage and formed the European Canadian sample. The remaining 22 participants were of varied ethnic backgrounds and were not included in the analyses.

##### MATERIALS

Three different versions of questionnaires were constructed, each targeting a particular kind of relationship: friendships, family relationships, and romantic relationships. These three versions were randomly distributed in the classrooms. Loosely modeled after a study by Van Lange and Rusbult (1995), participants were asked to list five positive aspects and three negative aspects of the specified kinds of relationships. We decided to include a greater number of positive aspects because our preliminary investigations revealed that people had a difficult time coming up with as many negative aspects. They were told specifically not to list attributes of their own relationships but of such relationships in general.

Next, participants were asked two questions for each of the five positive and three negative relationship aspects that they had just listed. First, they were asked how characteristic the aspects were of their own friendships/family relationships/romantic relationships from 1 (*not at all characteristic*) to 8 (*extremely characteristic*). Second, they were asked how characteristic the aspects were of such relationships for the average student from their university, same sex as themselves, using the identical scale. Relationship type (friendships, family relationships, and romantic relationships) was a between-groups variable in Study 2, in contrast to the within-groups variable employed in Study 1. Participants also were asked whether they were currently in a romantic relationship and, if so, for how long. Those who received the roman-



tic relationship version of the questionnaire and who were not currently in such a relationship were asked to answer the questions in terms of what they imagined their next romantic relationship would be like.

Participants then completed a measure of self-enhancement. Specifically, they were asked how characteristic 20 positively valenced traits were for themselves on a scale from 1 (*not at all characteristic*) to 8 (*extremely characteristic*). They were then asked how characteristic the same traits were for the average student from their university, same sex as themselves. An earlier study had identified these 20 traits as being viewed by Japanese and Canadians as especially important for succeeding in their respective cultures (Heine & Lehman, 1999).

Participants then completed the Center for Epidemiologic Studies Depression Scale (Radloff, 1977); the Global Self-Esteem Scale (Rosenberg, 1965); a modified version of the Relationship Satisfaction Scale (Murray et al., 1996b), which was altered to fit the specific type of relationship that participants evaluated; and some demographic items.

Canadians completed the questionnaires in English, whereas Japanese completed them in Japanese. All questionnaires originally were produced in English and then translated into Japanese using the same procedure as in Study 1.

### Results and Discussion

#### COMPARABILITY OF SAMPLES

An ANOVA revealed that the average age of the participants differed across the three samples,  $F(2, 428) = 53.15, p < .001$ . Post hoc analyses revealed that the Japanese sample ( $M = 18.7$  years) was significantly younger than either the European Canadian ( $M = 21.2$ ) or the Asian Canadian samples ( $M = 21.0$ ). Correlational analyses across the dependent variables within each cultural sample revealed only a few significant correlations with age and no pattern emerged. Age was thus not included as a covariate for the analyses reported below. The three samples differed in their sex proportions,  $\chi^2(2, N = 431) = 27.7, p < .001$ . Sex was included as a factor in all analyses and for the sake of brevity will be discussed only when effects reach conventional levels of significance.

#### RSBs

We first evaluated the individual components of RSBs (evaluations of own relationships, evaluations of others' relationships, and the differences between the two). Reliability analyses were conducted for each component, for each group of positive and negative characteristics, for each of the three relationship types, and within each of the three cultures. Cronbach's alphas ranged from .21 to .94 (average = .62). Although these items did not hang together as well as they did for the relationship

characteristics employed in Study 1 (likely owing to Study 2's idiographic design), we analyzed them as a set. The individual relationship aspects were averaged to form composites for both the positive and negative aspect types and analyses were conducted on these composites.

Between-culture analyses of participants' evaluations of characteristics of their own relationships and of their peers' relationships revealed a few cultural differences, although they did not form a discernible pattern. Japanese viewed their peers' friendships as significantly less positive than did European Canadians,  $F(2, 139) = 6.00, p < .005$ . Asian Canadians viewed their peers' friendships as significantly more negative than did European Canadians,  $F(2, 138) = 4.06, p < .02$ . The only other cultural differences that emerged were that Japanese evaluated their own romantic relationships as significantly more negative than did European Canadians,  $F(2, 31) = 3.81, p < .04$ , and Japanese evaluated their peers' romantic relationships as significantly less negative than either group of Canadians,  $F(2, 31) = 4.63, p < .02$ . No other evaluations of own or peer relationship characteristics differed significantly across cultures. Two main effects for sex also emerged: Women ( $M = 6.81$ ) rated their own family relationships to have more positive characteristics than did men ( $M = 5.83$ ),  $F(1, 133) = 23.76, p < .001$ , and women ( $M = 6.65$ ) viewed their own friendships as having more positive characteristics than did men ( $M = 6.22$ ),  $F(1, 137) = 6.14, p < .02$ .

RSBs were operationalized as the difference between the extent to which participants viewed each idiographically generated relationship aspect to be characteristic of (a) their own relationship and (b) the relationships of the average same-sex student from their university. A significant RSB for positive aspects was evident when the difference was positive (i.e., more characteristic for self than other) and for negative aspects when the difference was negative (more characteristic for other than self). Repeated-measure ANOVAs were conducted between one's own and others' relationships separately for each of the three different relationship types, with culture and sex as the between-group factors. For the sake of clarity, the difference scores are reported in Table 4. First, analyses did not reveal a cultural difference for RSBs among friendships for either the positive,  $F(2, 137) < 1$ , or the negative relationship aspects,  $F(2, 138) < 1$ . This pattern replicates that of Study 1. Repeated-measure analyses conducted within each cultural sample revealed that all cultures exhibited significant friendship RSBs, with the one exception being European Canadians' evaluations of the negative relationship aspects.

A significant Sex  $\times$  Target interaction emerged for family RSBs,  $F(1, 133) = 9.20, p < .01$ , revealing that

**TABLE 4: Means and Standard Deviations for Components of Relationship-Serving Biases in Study 2**

	Positive Aspects			Negative Aspects		
	European Canadian	Asian Canadian	Japanese	European Canadian	Asian Canadian	Japanese
Own friendships	6.64 <sub>a</sub> (0.78)	6.56 <sub>a</sub> (0.88)	6.11 <sub>a</sub> (1.05)	4.17 <sub>a</sub> (1.17)	4.55 <sub>a</sub> (1.66)	4.38 <sub>a</sub> (1.68)
Other friendships	6.17 <sub>a</sub> (0.78)	6.08 <sub>a, b</sub> (0.95)	5.46 <sub>b</sub> (1.12)	4.34 <sub>a</sub> (1.14)	5.07 <sub>b</sub> (1.14)	4.92 <sub>a, b</sub> (1.35)
Own–other friendships	0.47 <sub>a</sub> ** (0.64)	0.48 <sub>a</sub> * (1.14)	0.65 <sub>a</sub> ** (1.40)	–0.17 <sub>a</sub> (1.51)	–0.62 <sub>a</sub> * (1.58)	–0.54 <sub>a</sub> * (2.00)
Own family relationships	6.73 <sub>a</sub> ** (1.14)	6.63 <sub>a</sub> (1.20)	6.04 <sub>a</sub> (0.98)	4.24 <sub>a</sub> (1.85)	4.90 <sub>a</sub> (1.50)	5.14 <sub>a</sub> (1.43)
Other family relationships	5.92 <sub>a</sub> (0.75)	5.54 <sub>a</sub> (0.95)	5.44 <sub>a</sub> (0.91)	5.33 <sub>a</sub> (1.19)	5.43 <sub>a</sub> (1.06)	5.18 <sub>a</sub> (0.92)
Own–other family relationships	0.81 <sub>a</sub> ** (1.27)	1.09 <sub>a</sub> ** (1.02)	0.60 <sub>a</sub> ** (1.02)	–1.09 <sub>a</sub> ** (1.88)	–0.53 <sub>a</sub> * (1.29)	–0.04 <sub>a</sub> (1.32)
Own romantic relationships <sup>a</sup>	6.51 <sub>a</sub> (0.85)	6.43 <sub>a</sub> (1.44)	6.89 <sub>a</sub> (0.97)	4.73 <sub>a</sub> (1.59)	5.54 <sub>a, b</sub> (1.17)	6.19 <sub>b</sub> (1.28)
Other romantic relationships <sup>a</sup>	5.70 <sub>a</sub> (0.82)	6.23 <sub>a</sub> (0.54)	5.24 <sub>a</sub> (0.74)	5.67 <sub>a</sub> (0.89)	5.62 <sub>a</sub> (0.71)	4.56 <sub>b</sub> (0.76)
Own–other romantic relationships <sup>a</sup>	0.81 <sub>a</sub> ** (1.04)	0.20 <sub>a</sub> (1.39)	1.65 <sub>a</sub> ** (0.94)	–0.94 (1.86)	–0.08 <sub>a</sub> (1.27)	1.63 <sub>b</sub> * (1.46)

NOTE: Standard deviations are reported in parentheses. Rows with different subscripts are significantly different from one another at  $p < .05$ . a. Includes only participants who were currently involved in a romantic relationship.

\*Own relationship is significantly different from other relationship at  $p < .05$ . \*\*Own relationship is significantly different from other relationship at  $p < .01$ .

women ( $M = 1.05$ ) viewed their family relationships in more unrealistically positive terms than did men ( $M = .36$ ). A significant cultural difference also did not emerge among positive relationship aspects for family relationships,  $F(2, 133) = 1.66$ ,  $ns$ . In contrast, however, such a difference did emerge for negative characteristics,  $F(2, 137) = 3.27$ ,  $p < .05$ , indicating that both groups of Canadians tended to exhibit a more pronounced trend for RSBs for negative aspects among family relationships than did Japanese, although post hoc comparisons were not significant. All family RSBs were significant aside from Japanese evaluations of the negative relationship aspects.

Before conducting analyses for romantic relationships, participants were split on the basis of whether they were currently in a romantic relationship: 55% of European Canadians, 37% of Asian Canadians, and 13% of Japanese reported being currently romantically involved. These proportions are significantly different,  $\chi^2(2, N = 138) = 20.2$ ,  $p < .001$ . The small proportion of Japanese in romantic relationships is likely due to their being mostly 1st-year students who had entered university just prior to the study (this is in contrast to the more senior Japanese students who participated in Study 1). Moreover, those Japanese who were currently in romantic relationships were so for a shorter period of time than were the Canadians. Eighty-one percent of European Canadians in a romantic relationship, compared with 93% of Asian Canadians and only 44% of Japanese, reported that their relationship began at least 3 months ago,  $\chi^2(2, N = 39) = 7.52$ ,  $p < .03$ . That we have data from only 9 Japanese in actual romantic relationships, 5 of whom had been involved for less than 3 months, reduces these data to pilot status, and we urge caution in interpreting them.

ANOVAs did not reveal cultural differences with respect to the positive relationship aspects for romantic relationships,  $F(2, 33) = 1.77$ ,  $ns$ . This result contrasts with the significant difference observed in Study 1. Both European Canadian and Japanese participants exhibited significant RSBs for their romantic partners, whereas the bias for Asian Canadians was not significant. Analyses for the negative characteristics revealed a different pattern. A significant cultural difference emerged,  $F(2, 31) = 7.22$ ,  $p < .01$ , which post hoc analyses revealed was due to both groups of Canadians viewing the negative relationship aspects to be less characteristic of their romantic relationships relative to their peers than did Japanese. Repeated-measure analyses within each cultural group revealed that whereas both groups of Canadians exhibited nonsignificant tendencies toward negative-aspect RSBs, Japanese participants displayed significant relationship effacement. As in Study 1, we conducted analyses on participants' imagined romantic partners, but given the absence of any interpretable pattern, these results will not be discussed.

Although the pattern of RSBs for the positive and negative relationship aspects paralleled each other to some extent, there were a few occasions in which the valence of the relationship aspect led to different results. Specifically, European Canadians exhibited significant RSBs when they evaluated the positive aspects of their friendships and romantic relationships but not when they evaluated the negative aspects. Japanese exhibited significant RSBs when they evaluated the positive aspects of their family and romantic relationships but not when they evaluated the negative aspects of their family (no bias) or romantic relationships (reverse bias). In general, it seems that RSBs were less pronounced for negative aspects than for positive aspects. Perhaps people are

**TABLE 5: Means and Standard Deviations for Other Dependent Variables in Study 2**

	<i>European Canadian</i>		<i>Asian Canadian</i>		<i>Japanese</i>	
Self-evaluations	6.27 <sub>a</sub>	(1.22)	6.05 <sub>a</sub>	(1.24)	4.60 <sub>b</sub>	(0.74)
Other-evaluations	5.91 <sub>a</sub>	(0.84)	5.83 <sub>a</sub>	(0.82)	5.27 <sub>b</sub>	(0.69)
SSBs	0.36 <sub>a</sub> ***	(0.65)	0.22 <sub>a</sub> **	(0.79)	-0.67 <sub>b</sub> ***	(1.05)
Self-esteem	39.8 <sub>a</sub>	(6.50)	36.4 <sub>b</sub>	(7.78)	31.3 <sub>c</sub>	(7.22)
Depression	18.6 <sub>a</sub>	(6.61)	20.7 <sub>a</sub>	(6.34)	19.5 <sub>a</sub>	(6.26)
Relationship-satisfaction friendships	15.7 <sub>a</sub>	(3.49)	15.3 <sub>a</sub>	(3.94)	15.4 <sub>a</sub>	(2.89)
Relationship-satisfaction family relationships	16.2 <sub>a</sub>	(4.22)	15.9 <sub>a</sub>	(3.45)	14.2 <sub>a</sub>	(3.06)
Relationship-satisfaction romantic relationships	16.2 <sub>a</sub>	(2.71)	15.3 <sub>a</sub>	(3.87)	17.2 <sub>a</sub>	(2.17)

NOTE: SSBs = self-serving biases. Standard deviations are reported in parentheses. Rows with different subscripts are significantly different from one another at  $p < .05$ .

\*\*SSB is significantly different from 0 at  $p < .01$ . \*\*\*SSB is significantly different from 0 at  $p < .001$ .

not averse to noting the negative features of their relationships relative to others while simultaneously wanting to enhance the virtues of their relationships as much as possible. More research is necessary to better understand the differences in participants' reactions to positive and negative relationship aspects.

In sum, Study 2 replicated the general pattern observed in Study 1. Japanese exhibited positive biases in their perceptions of their relationships, and at comparable levels to Canadians. That these biases were evident employing idiographic measures, for both positive and negative aspects of relationships and for friendships and family relationships in general (as compared with those found in Study 1 for best friendships and closest family relationships), increases our confidence in the reliability of these biases.

#### SELF-SERVING BIASES

We first analyzed the individual components of the self-serving biases (i.e., self- and other evaluations). Reliability analyses conducted within each cultural group and for each target (self and other) revealed that the 20 traits were responded to in a consistent manner: Cronbach's alphas ranged from .83 to .93 (average = .89). Comparisons of self-evaluations revealed a pronounced effect for culture,  $F(2, 418) = 135.81, p < .001$  (see Table 5). Post hoc analyses revealed that both groups of Canadians evaluated themselves significantly more positively than did Japanese. Japanese also were significantly less positive than both groups of Canadians when evaluating others,  $F(2, 417) = 32.47, p < .001$ . Paralleling the findings in Study 1, this provides support that Japanese tend to view themselves and others less positively than North Americans (Heine et al., 1999; Kitayama et al., 1998). A main effect for sex also emerged in participants' evaluations of others,  $F(1, 417) = 13.93, p < .001$ , revealing that women ( $M = 5.81$ ) tended to evaluate others more positively than did men ( $M = 5.52$ ).

We operationalized self-serving biases (SSBs) as the difference between the extent to which participants viewed the positively valenced traits to be characteristic of (a) themselves and (b) their same-sex peers. Analyses of SSBs were conducted via repeated-measure ANOVAs, and the differences between the means are presented in Table 5. Significant positive values reflect SSBs. A highly significant Culture  $\times$  Target interaction emerged,  $F(2, 412) = 50.66, p < .001$ , which post hoc analyses revealed was due to both groups of Canadians exhibiting more pronounced SSBs than did Japanese. Repeated-measures ANOVAs revealed that both groups of Canadians were significantly self-enhancing, whereas Japanese were significantly self-effacing (i.e., they rated the traits as more characteristic of their peers than of themselves). This pattern replicates those observed in many cross-cultural studies of self-enhancement (Heine & Lehman, 1999; Heine, Takata, & Lehman, 2000; Kitayama et al., 1995, 1997).

In summary, although Study 2 demonstrated significant relationship-enhancing tendencies in Japanese, they were nevertheless self-effacing when evaluating themselves. This pattern also indicates conceptual differences between self-enhancement and relationship enhancement.

#### TRAIT MEASURES

Between-culture ANOVAs were conducted for each of the trait measures. A significant effect for culture again emerged for global self-esteem,  $F(2, 420) = 51.12, p < .001$ . Post hoc analyses revealed that European Canadians had higher self-esteem scores than did Asian Canadians, who in turn had higher scores than Japanese.

Cross-cultural comparisons of the depression scale revealed a marginally significant effect for culture,  $F(2, 419) = 2.97, p < .06$ . None of the post hoc comparisons were significant, although Asian Canadians nominally scored the highest on depression and European Canadians scored the lowest.

TABLE 6: Correlations Among Dependent Variables in Study 2

	European Canadians				Asian Canadians				Japanese			
	SSB	SE	Depression	RS	SSB	SE	Depression	RS	SSB	SE	Depression	RS
Positive characteristics												
Own relationships	.00	.21	.03	.62***	.21	.13	-.17	.46***	.05	-.05	.03	.56***
Others' relationships	-.04	.33**	-.17	.18	-.12	.01	-.02	.24*	-.08	.00	-.08	.01
RSB	.04	-.06	.18	.43***	.27*	.11	-.13	.22*	.10	-.04	.09	.46***
Negative characteristics												
Own relationships	.15	-.19	.27*	-.27*	.05	.01	.14	-.18	-.09	-.12	.14	-.06
Others' relationships	.09	-.14	.11	.02	-.05	-.01	.19	.14	.05	-.05	.29***	.08
RSB	.09	-.09	.19	-.29**	.09	.03	.00	-.31**	-.12	-.08	-.06	-.11

NOTE: RSB = relationship-serving biases, SSB = self-serving biases, SE = self-esteem, RS = relationship satisfaction.  
\* $r$  is significant at  $p < .05$ . \*\* $r$  is significant at  $p < .01$ . \*\*\* $r$  is significant at  $p < .001$ .

Relationship satisfaction was analyzed separately for each of the three relationship types (again excluding those with imagined romantic relationships). There were no effects for culture for friendships,  $F(2, 140) < 1$ , family relationships,  $F(2, 140) = 2.07$ ,  $ns$ , or romantic relationships,  $F(2, 33) < 1$ . Similar to RSBs, satisfaction with one's relationships seems to exist at comparable levels across cultures.

#### CORRELATIONS BETWEEN RSBs AND OTHER STUDY MEASURES

Given the relatively small sample sizes for each relationship type within each cultural group, we conducted correlations for each cultural sample collapsed across relationship type (excluding those with imagined romantic relationships) in an effort to increase the power of the analyses. Correlations were conducted with the difference scores for RSBs (own relationship minus other relationship) and SSBs (self-evaluation minus other evaluation).

First, examining the relations among the relationship variables and SSBs we can see that aside from the one exception of a modest correlation for Asian Canadians between RSBs for positive relationship aspects and SSBs, the relationship variables were not correlated with SSBs (see Table 6). In general, then, viewing oneself in unrealistically positive terms (SSBs) was not associated with how unrealistically positive one viewed one's relationships (RSBs). Although both constructs reflect biases in perception of characteristics related to oneself, SSBs and RSBs appear to be largely independent of one another. RSBs thus do not appear to be merely the result of a general predisposition to inflate one's standing.

Replicating Study 1, we did not find significant relations between RSBs and global self-esteem. Evaluating oneself positively was not related to how unrealistically positive one viewed one's relationships, nor were there any relations between positive evaluations of one's relationships and self-esteem (although European Canadi-

ans did exhibit a relation between how positively they evaluated others' relationships and self-esteem). Similarly, there were no significant correlations between RSBs and depression. Those who viewed their relationships especially positively, relative to others, were no less likely to report depressive symptoms. However, European Canadians who viewed their own relationships negatively did tend to have higher depression scores, as did Japanese who viewed others' relationships negatively. Again, the overall pattern of results suggests that the ways in which people evaluate their relationships in unrealistically positive terms bear little relation to how they feel about themselves. RSBs appear to exist in a separate domain from self-evaluations (Heine et al., 1999; Kwan et al., 1997; however, cf. Murray et al., 1996a, 1996b).

The only reasonably consistent pattern of correlations was found between RSBs and relationship satisfaction. With the exception of Japanese RSBs for negative relationship aspects, the more unrealistically positive one viewed one's relationship, the more one was satisfied with that relationship. Similarly, positive evaluations of one's own relationships were consistently related with relationship satisfaction and negative evaluations of one's relationship were inversely related to relationship satisfaction among European Canadians, although the correlation was not significant for the other two groups.

#### GENERAL DISCUSSION

These two studies, to our knowledge, provide the first evidence of Japanese's exhibiting systematic positive distortions, and distortions similar in magnitude to those of North Americans. In past studies, when assessing themselves on self-attributes, or the groups to which they belong, Japanese have consistently been less enhancing than Westerners (Heine & Lehman, 1995, 1997a, 1999; Heine, Takata, & Lehman, 2000; Kitayama et al., 1995, 1997; Meijer & Semin, 1998). In the present studies,

however, when the focus of the evaluation shifted from what is inside individuals to what is between them, the cultural differences largely vanished.

That unrealistically positive views are evident among Japanese in their evaluations of their relationships but not in their evaluations of their inner attributes suggests that relationship enhancement is a process more meaningful than self-enhancement to the interdependent self. The Japanese self appears to be better served by RSBs than by SSBs. Perhaps Japanese engage in relationship enhancement to increase their feelings of connection with others. Such a process appears distinct from an enhancement of one's worth as an individual, and the lack of correlation between SSBs and RSBs supports this notion.

The magnitudes of RSBs in the two studies were remarkably similar across cultures. This suggests one of two distinct possibilities. First, relationship enhancement may be a cultural universal. That humans have evolved as inherently social beings (e.g., Baumeister & Leary, 1995) may mean that humans everywhere are motivated to view their sense of belongingness as secure and sound. A fundamental motivation of humans may be to expand and actualize themselves through close relationships (Aron & Aron, 1994).

Second, the pronounced cultural differences in self-enhancement raise the possibility that RSBs are based on different psychological processes across the cultural samples. North Americans have been observed to self-enhance on a wide variety of dimensions (see Taylor & Brown, 1988, for a review): They view themselves more positively than others (e.g., Campbell, 1986; Marks, 1984); they view their futures as more positive than others (e.g., Weinstein, 1980); they view themselves to be in control more so than situations allow (Langer, 1975); and they view their sports teams (Lau & Russell, 1980), schools (Cialdini & Richardson, 1980; Heine & Lehman, 1997a), cities (Kitayama, Palm, Masuda, Karasawa, & Carroll, 1996), and friends (Brown, 1986) more positively than those of others. RSBs among North Americans may be simply another indicator of Westerners viewing themselves in unrealistically positive terms (although it is important to note that RSBs and SSBs were statistically unrelated in the present studies). In contrast, past research with Japanese has revealed a lack of self-enhancement, and sometimes even self-effacement, across a variety of domains. In fact, thus far, RSBs are the only ways in which Japanese have exhibited consistent positively biased distortions.

Moreover, unlike the Canadians, Japanese consistently viewed their partners as possessing more desirable relationship characteristics than they did themselves. Hence, it seems unlikely that Japanese view the success of

their relationships as due to their partners being so attracted to their own inner charms (cf. Endo, 1998). Rather, Japanese may view their relationships unrealistically positively, at least in part, because of the very qualities of their relationship partners. Perhaps they feel that their relationships are so good because they have aligned themselves with greatness (cf. Weisz, Rothbaum, & Blackburn, 1984). This speculation could account for the different patterns among self- and relationship evaluations across the cultures. It is thus plausible that Japanese and Canadians exhibit RSBs for different reasons, although they manifest them to a comparable extent.

Whether RSBs reflect a universal human need to belong or are a phenomenon that is sustained by divergent cultural practices remains an interesting question for further exploration. RSBs represent a relatively new topic of study in social psychology and clearly more empirical work needs to be conducted for us to move closer to understanding the actual psychological mechanisms and processes at work.

Two significant cultural differences emerged in the magnitude of RSBs in the present studies. Study 1 revealed that European Canadians viewed their own romantic relationships in more unrealistically positive terms than did Japanese, and Study 2 revealed that Japanese viewed negative aspects to be more characteristic of their own romantic relationships than those of their peers, whereas both groups of Canadians exhibited the reverse pattern. That both of these cultural differences emerged with respect to romantic relationships may be telling. Indeed, a number of researchers have questioned whether romantic love is a cross-cultural universal, arguing instead that it may largely be a Western cultural product (Averill, 1985; Dion & Dion, 1993). Although there does appear to be something akin to romantic love in Japan, and this trend seems to be increasing, we agree that an emphasis on the importance of romantic love in relationships is a relatively recent phenomenon in Japan. Indeed, a significant portion of modern-day Japanese marriages are still arranged. In contrast, many Westerners believe that romantic love is the foundation of a relationship and if it wanes the relationship might best be dissolved. Indeed, Murray and colleagues (1996a, 1996b) have shown that romantic love is facilitated precisely by such tendencies to view one's romantic partners in unrealistically positive terms. That the only kind of relationship in which Canadians viewed their partners more positively than themselves was the romantic relationships reflects the presence of these biases in romance.

#### *LIMITATIONS AND FUTURE DIRECTIONS*

A couple of limitations inherent in the present methodologies deserve comment. First, in both studies we

operationalized RSBs by comparing people's beliefs about their own actual relationships with how they imagine the average person's relationship. It may be difficult for people to arrive at an accurate perception of the average person's relationships. It is plausible that people tend to remember other people's relationships better if they are particularly negative relationships, and thus, their view of the average person would be negatively biased. Some evidence, however, that in general RSBs for negative aspects tended to be less pronounced than they did for positive aspects is opposite to what one would expect if people dwelled on the negative features of others' relationships. As well, this negativity bias explanation would suggest that people are more likely to remember their own negative relationship experiences better than their positive ones, which would contribute to reducing the magnitude of RSBs. Nonetheless, one limitation of this design is that we are unable to know whether significant RSBs reflect unrealistic enhancement of one's own relationships, unrealistic effacement of the average other's relationships, or both.

A second limitation concerns how people from the different cultures perceive the desirability of being average. It may be the case that being average implies fitting in for Japanese and hence is a desirable state. Viewing oneself as average may provide Japanese with positive feelings akin to enhancement. In contrast, North Americans may view being average as relatively undesirable and thus self-enhance by perceiving themselves as better than average. Although this is an intriguing possibility, it is not supported by the present data. Japanese and Canadians were equally likely to perceive their relationships as better than average, and when evaluating themselves, Japanese rated themselves as below average. The possibility that Japanese may be more satisfied with being average than North Americans suggests further complexities in understanding self-enhancement in an interdependent culture. North Americans may operate under a "more is better" heuristic, whereas there may be occasions when evaluating themselves that Japanese think "more is too much."

Relationship enhancement seems, in many respects, to be a process that is highly similar to self-enhancement. The former reflects motivations to view one's relationships positively, and the latter reflects motivations to view one's self positively. Perhaps there are similarities between other kinds of psychological processes that relate to positive self-views. There are a variety of self-evaluation maintenance strategies that hinge on a motivation for a positive self-view (e.g., compensatory self-enhancement, downward social comparison, motivated reasoning biases) and it is plausible that there are comparable processes that hinge on a motivation to view

one's relationships positively. For example, Endo (1996) asked Japanese participants to rate how much the various aspects of their friendships were related to the success of their friendships. She found that regardless of the aspect that participants rated (e.g., similar attitudes or complementary attitudes), they were viewed equally to promote the success of their friendships (cf. discussion of motivated reasoning strategies, Kunda, 1987). Similarly, we might also expect that people would view their family relationships more positively after discovering that their romantic relationships are in jeopardy (cf. discussion of global self-evaluation maintenance strategies of North Americans, Baumeister & Jones, 1978; Steele, 1988; Tesser, 1988). Or, after experiencing a threat to their relationships, such as being stood up by a friend, we might expect people to seek relationship comparison targets that are less positive than their own friendships (cf. discussion of social comparison strategies, Wills, 1981; Wood, 1989). The notion that relationship esteem is an analog to self-esteem suggests the possible existence of a parallel world of psychological phenomena: one in which relationships are enhanced, esteemed, and protected in similar ways to the independent self.

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