

The authors investigated compensatory self-enhancement in Japanese and Canadian university students. Research has revealed that when North Americans publicly discover a weakness in one self domain, they typically bolster their self-assessments in another unrelated domain. This effect is less commonly found in private settings. Following a private failure experience on a creativity task, Canadians discounted the negative feedback, although they did not exhibit a compensatory self-enhancing response. In contrast, Japanese were highly responsive to the failure feedback and showed evidence of reverse compensatory self-enhancement. This study provides further evidence that self-evaluation maintenance strategies are elusive among Japanese samples.

CULTURAL DIFFERENCES IN SELF-EVALUATION Japanese Readily Accept Negative Self-Relevant Information

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Much research on the self hinges on the notion that people have a need for self-esteem (e.g., Baumeister, 1993; Leary, Tambor, Terdal, & Downs, 1995; Solomon, Greenberg, & Pyszczynski, 1991). The prevalence of this need can be observed in studies that measure self-esteem (e.g., Baumeister, Tice, & Hutton, 1989; Diener & Diener, 1996; Rosenberg, 1965) and self-enhancement (e.g., Greenwald, 1980; Taylor & Brown, 1988; Zuckerman, 1979), but the evidence for this need is perhaps most clear from studies that fall under the general rubric of self-evaluation maintenance (SEM) (Tesser, 1988).

To simplify, the SEM literature reveals how people (typically North Americans) attempt to maintain a positive self-view when they encounter negative information about themselves. For example, Steele and colleagues' (Steele, 1988; Steele & Liu, 1983; Steele, Spencer, & Lynch, 1993) work on self-affirmation shows that when people confront a threat to their self-esteem they engage in dissonance reduction to restore a global sense of self-integrity. In contrast, no dissonance reduction is evident when people are led to feel good about themselves through other means. Cialdini et al. (1976) demonstrated that people are more likely to bask in the reflected glory of their school's sports team if they have just previously failed a test. Tesser and colleagues' research shows how various aspects of the environment may be manipulated by a person in the service of protecting a positive self-image: For example, people may increase the interpersonal distance between themselves and successfully

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performing comparison targets (Pleban & Tesser, 1981), decrease the perceived relevance of a task if they performed poorly on it (Tesser & Paulhus, 1983), sabotage the performance of a friend on a self-relevant task (Tesser & Smith, 1980), or choose friends that allow one to fare well both in comparison and reflection situations (Tesser, Campbell, & Smith, 1984).

However, evidence of a need for self-esteem is less forthcoming in studies with samples outside North America, in particular, in Japan. For instance, Japanese score much lower on measures of self-esteem than North Americans (Heine, Lehman, Markus, & Kitayama, 1999) and they show little evidence of self-enhancing biases (Heine & Lehman, 1995, 1997a; Heine, Takata, & Lehman, 2000; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Kitayama, Takagi, & Matsumoto, 1995; Markus & Kitayama, 1991; Meijer & Semin, 1999). Most pertinent to this investigation, evidence of SEM strategies in Japan is strikingly lacking (for a review see Heine, Lehman, et al., 1999). There is little consistent evidence for any of the commonly studied SEM strategies among Japanese samples. Moreover, a cross-cultural investigation of self-affirmation processes among Canadians and Japanese employing the free-choice dissonance paradigm revealed clear self-affirming tendencies for Canadians but no evidence for such tendencies among Japanese (Heine & Lehman, 1997a).

One possible conclusion from the research conducted thus far is that Japanese are less likely to engage in SEM strategies. Indeed, it is not clear that SEM tendencies would be as functional in a Japanese cultural environment as they are in North America. In past papers (Heine et al., 1999; Kitayama & Markus, in press; Kitayama et al., 1997), we have argued that Japanese are more likely to maintain a self-critical attitude, as this better enables them to pursue tasks relevant within their cultural context. Specifically, Japanese culture has been importantly shaped by Confucian values, such as an emphasis on knowing one's roles within a hierarchy and of fulfilling obligations associated with these roles. This orientation leads Japanese to be concerned with role mastery (Befu, 1986; De Vos, 1973). The better that individuals can live up to the standards associated with their roles, the more they can contribute to and gain connection with their relevant groups.

One strategy for individuals to live up to the standards of their roles is for them to be vigilant of any information that highlights how their performance might be falling short of the relevant consensually shared criteria (Doi, 1973). An acute awareness of information indicating transgressions from the standards of performance associated with their roles aids individuals by highlighting the areas in which they need to make efforts to reduce the perceived discrepancies. Such efforts to more closely approximate the shared standards of performance enable Japanese to affirm their connection with the social unit that maintains this standard. These self-improving efforts thus serve to enhance feelings of interdependence and belongingness, particularly in cultures that emphasize hierarchy and role mastery.

This theoretical rationale suggests that negative self-information elicits different reactions from Japanese and North Americans. In a Japanese context, the discovery of negative features about the self serves to highlight where one needs to make efforts so as to move toward the consensually shared standards. Negative information about the self thus should be sought out rather than avoided. In contrast, in a North American context, becoming aware of negative self-features highlights relatively immutable inadequacies of the individual, symbolizing how he or she lacks the qualities valued in an individualistic society, such as the ability to be self-sufficient, autonomous, and to make one's own unique mark in the world. Negative self-relevant information thus should be particularly threatening within a North American cultural context. This cultural difference in the meaning of negative self-information suggests that Japanese should be less likely than North Americans to respond to such

information by engaging in any of the self-protective SEM strategies that have been identified in the Western literature.

However, the notion that Japanese have less pronounced SEM motivations than North Americans has received direct empirical support in only one published cross-cultural study of SEM tendencies (Heine & Lehman, 1997a). The observed lack of Japanese SEM in that study may have been owing to idiosyncrasies inherent in the post-decisional dissonance paradigm that was employed. We sought to explore whether comparable cultural differences would be found with respect to another kind of SEM tactic: namely, compensatory self-enhancement.

Compensatory self-enhancement is the tendency to evaluate oneself more positively in a particular domain after receiving negative feedback in an unrelated domain. This act is a means to compensate for the newly discovered deficiency, particularly in public conditions (Baumeister & Jones, 1978). The self-esteem threat associated with the negative feedback is effectively disarmed by enhancing a different part of the self. Evidence for compensatory self-enhancement comes from a variety of experimental paradigms conducted with North Americans. For example, Apsler (1975) found that participants who were embarrassed were more likely to offer help to a person than those who had not been embarrassed. Brown and Smart (1991) demonstrated that people with high self-esteem rated their social skills higher and were more likely to offer help to others if they had failed on an achievement test than if they had succeeded. Steele et al. (1993) found that individuals displayed more confidence in their decisions if they had received unrelated negative personality feedback than if they had received positive feedback (also see Heine & Lehman, 1997a). Baumeister and Jones (1978) found that participants rated themselves as more moral if they had received unrelated negative personality feedback in either public or private settings, although compensatory self-enhancement for other aspects of the self was evident only in public settings. Greenberg and Pyszczynski (1985) also found evidence for compensatory self-enhancement with public feedback (see also Schneider, 1969) but no such evidence with private feedback. In sum, compensatory self-enhancing strategies are commonly observed in North American samples in public settings, although they are less reliably found in private settings.

Thus far there is no published research documenting compensatory self-enhancing tendencies among Japanese. This void in the literature may reflect that researchers have been unable to replicate compensatory self-enhancing tendencies with Japanese samples. We sought to explicitly investigate the existence of compensatory self-enhancement among Japanese by conducting a controlled cross-cultural laboratory study with Canadian and Japanese participants.

METHOD

PARTICIPANTS¹

Canadian participants were introductory psychology students enrolled at the University of British Columbia (UBC). Participants were contacted through the participant pool, and because we wanted to compare a Western sample with the Japanese, participants were selected on the basis of having names that were likely of European origin. Sixty-two students participated in the experiment, but the data of 2 were eliminated because they expressed

suspicion regarding the deception, leaving a total of 60 participants (34 women and 26 men) in the final Canadian sample. Japanese participants were introductory psychology students at Kyoto University in Kyoto, Japan. Seventy-eight participants completed the experiment, but the data of 1 were eliminated because the person was not fluent in Japanese. None of the Japanese participants expressed any suspicion regarding the deception. This resulted in a total of 77 participants (32 women and 45 men) in the final Japanese sample.

PROCEDURE

Participants were provided with success or failure feedback on what they were told was a test of creativity—the Remote Associations Test (RAT) (Mednick, 1962). Participants completed this test in private and the experimenter never saw how they performed.

Participants were randomly assigned to either a success or failure condition. Those in the failure condition worked on a version of the RAT that consisted of mostly difficult items (as determined by a prior pretest). Those in the success condition worked on a version of the RAT that contained mostly easy items. After 8 minutes the experimenter stopped them and gave them an answer sheet and a distribution of the RAT performance of other students from their university. Participants graded their own tests and discovered that for each item there was indeed a correct answer. They were then asked to look over the distribution sheet and circle the number that they had gotten correct and the corresponding percentile ranking for that score. The percentile distribution was skewed so that the vast majority of participants in the failure condition discovered that they scored well below the 50th percentile, whereas those in the success condition found that they performed well above the 50th percentile. The experimenter was blind to the assignment of condition.

After being given the opportunity to work on a second set of RAT items while the experimenter was away from the lab (see Study 1 of Heine et al., in press), the participant was given a follow-up questionnaire containing the compensatory self-enhancement measure on the experimenter's return. After completing this questionnaire, the participant was probed for suspicion and thoroughly debriefed. For Canadian participants the study was conducted in English by a female experimenter and for Japanese participants the study was conducted in Japanese by either a female or a male experimenter.

MATERIALS

The questionnaire consisted of a manipulation check, a compensatory self-enhancement measure, and some follow-up items that are discussed elsewhere (Heine et al., in press, Study 1). The manipulation check items asked participants to recall how many RAT items they had answered correctly and what their percentile score was. The compensatory self-enhancement measure consisted of 10 rating scales. Participants were asked to estimate the percentage of students from their university, of their same gender, that they were better than with respect to 10 traits and abilities: athletic, attractive, considerate, cooperative, creative, dependable, gets along well with others, sense of humor, hard working, and independent. Last, participants completed some demographic items.

The RAT items were created in both Japanese and in English, whereas the other measures in the study were translated into Japanese from English using an extensive translation procedure (Heine et al., in press, Study 1).

RESULTS

PRELIMINARY ANALYSES

One Canadian participant assigned to the success condition failed to get enough of the RAT items correct to score above the 50th percentile, and one Japanese assigned to the failure condition got too many correct so that he scored above the 50th percentile. The data from both of these participants were excluded from the final sample, as the feedback they received was at odds with their assigned condition. As well, the data from one Canadian was excluded for incorrectly remembering her percentile score (she indicated that she scored below the 50th percentile when in fact she had scored above it). The key effects in this study remain significant when these 3 participants are included.

Fifty-seven percent of the final Canadian sample were women, in contrast to 42% of the Japanese sample. These proportions are marginally different, $\chi^2(1, N = 134) = 2.88, p < .09$. Gender was included as a factor in all analyses and will be reported whenever the effects reach conventional levels of significance. The Canadian sample ($M = 19.4$ years) was marginally older than the Japanese sample ($M = 18.9$ years), $F(1, 134) = 3.60, p < .07$, but age did not correlate with any of the key dependent variables and will not be discussed further.

Canadians assigned to the success condition answered, on average, 7.1 items correctly out of 10 ($SD = 1.81$), corresponding to the 88th percentile ($SD = 13.4$), whereas Japanese success participants averaged 6.8 items correct ($SD = 1.48$), corresponding to the 85th percentile ($SD = 11.1$). These scores are not significantly different, $F(1, 61) < 1$. Canadians assigned to the failure condition answered, on average, 1.6 items correctly out of 10 ($SD = 1.41$), corresponding to the 14th percentile ($SD = 11.2$), whereas Japanese failure participants averaged 1.8 items correct ($SD = 1.59$), corresponding to the 15th percentile ($SD = 13.1$). These scores also are not significantly different, $F(1, 72) < 1$. Across conditions there was a highly significant effect for both the number of items answered correctly, $F(1, 132) = 466.59, p < .001$, and the average percentile score, $F(1, 132) = 14,795.8, p < .001$.

COMPENSATORY SELF-ENHANCEMENT MEASURES

Participants' assessments of their creativity were analyzed with respect to the feedback they received. First, analyses with Canadians revealed that their estimates of their creativity were unaffected by the feedback they received. Regardless of whether they had just discovered that they had done much better or much worse on a creativity test than most other students from their university, their estimates of their percentile ranking did not significantly differ, $F(1, 52) < 1$ (see Table 1). Canadians apparently discounted the significance of the creativity test, particularly if they had received failure feedback. Similar responses of Canadians to failure feedback have been documented in a variety of studies (Heine et al., in press; Heine & Lehman, 1997a; Heine et al., 2000).

In contrast, Japanese assessments of their creativity were highly responsive to the feedback. Indeed, Japanese who had received failure feedback estimated that they were significantly worse than more of their classmates at creativity,² $F(1, 67) = 14.84, p < .001$. This cross-cultural difference in responsiveness to success and failure feedback replicates a pattern that has been demonstrated in past research (Heine et al., 2000).

Compensatory self-enhancement was assessed by measuring how participants rated themselves on the nine other traits and abilities for which they did not receive feedback. We calculated participants' estimates from the percentage of students from their university that

TABLE 1
Means and Standard Deviations (in parentheses)
for Creativity and Other Trait Measures

	<i>Canadians</i>		<i>Japanese</i>	
	<i>Success</i>	<i>Failure</i>	<i>Success</i>	<i>Failure</i>
Creativity	54.3 ^a (22.4)	50.2 ^a (21.0)	50.0 ^a (25.1)	26.7 (24.7)
Athletic	55.8 ^a (27.5)	53.5 ^a (29.0)	38.8 ^a (24.6)	35.7 ^a (25.3)
Attractive	56.6 ^a (18.5)	53.1 ^a (23.1)	40.2 ^a (22.5)	25.2 (21.6)
Considerate	60.6 ^a (20.4)	62.3 ^a (19.7)	47.5 ^a (24.7)	40.5 ^a (27.0)
Cooperative	52.2 ^a (20.8)	54.1 ^a (18.7)	45.6 ^a (22.3)	43.7 ^a (25.7)
Dependable	62.6 ^a (23.1)	66.8 ^a (20.2)	53.3 ^a (23.9)	38.4 (26.8)
Gets along well with others	66.0 ^a (15.1)	60.7 ^a (21.3)	45.8 ^a (27.4)	40.5 ^a (26.5)
Hard working	55.5 ^a (21.2)	53.8 ^a (22.2)	53.4 ^a (24.5)	44.1 ^a (27.2)
Independent	59.4 ^a (19.9)	55.7 ^a (21.6)	48.6 ^a (25.8)	32.1 (22.6)
Sense of humor	64.4 ^a (18.1)	63.7 ^a (19.8)	45.5 ^a (24.3)	27.8 (26.3)
Average of trait measures excluding creativity	59.7 ^a (13.8)	58.2 ^a (17.0)	46.8 ^a (17.4)	36.1 (19.0)

a. Rows having both superscripts and no superscripts within a culture are significantly different at $p < .05$.

they could perform better than on the remaining nine traits and abilities (excluding creativity). Cronbach's alphas for these nine traits and abilities were .89 for each cultural group, indicating that participants tended to respond to these items quite similarly regardless of the content. This suggests that participants were evaluating themselves in a top-down manner.

Analyses with the Canadians revealed that their estimates (averaged across the nine traits) were unaffected by the feedback, $F(1, 52) < 1$. Participants who discovered that they had performed well on creativity felt that they were better on the remaining nine other traits and abilities than approximately the same percentage of their classmates (range across the nine traits and abilities = 52.2 to 66.0), as did those who found out that they had performed poorly on creativity (range = 53.5 to 66.8). There were no significant differences between conditions for any of the nine traits and abilities. Canadians thus did not exhibit compensatory self-enhancement, although they clearly discounted the failure feedback. Moreover, their responses revealed evidence of self-enhancement. We assume that these traits and abilities are normally distributed within each cultural sample, and thus, estimates significantly different from 50% are taken to indicate either self-enhancement or self-effacement. For their average assessment of the nine traits and abilities, Canadians felt that they were better than significantly more than 50% of their peers regardless of whether they had succeeded, $t(22) = 3.38, p < .01$, or failed on the creativity test, $t(32) = 2.76, p < .01$.

The lack of a compensatory self-enhancement effect among Canadians is at odds with some past studies that were also conducted in private settings (Apsler, 1975; Heine &

Lehman, 1997a; Steele et al., 1993). However, other researchers have noted that compensatory self-enhancement with North Americans is only reliably found in public settings (Baumeister & Jones, 1978; Greenberg & Pyszczynski, 1985). Thus, we expect that if the Canadian participants had been presented with public feedback, they would have replicated the robust compensatory self-enhancement pattern.

Analyses with Japanese revealed a different pattern. Japanese who had performed well on the creativity task felt that they were better on the other nine traits and abilities than significantly more of their classmates ($M = 46.8$, $SD = 17.4$; range across the nine traits and abilities = 38.8 to 53.4) than did those who had performed poorly ($M = 36.1$, $SD = 19.0$; range = 25.2 to 44.1), $F(1, 65) = 5.63$, $p < .03$. Significant differences emerged across conditions for four of the nine traits (attractive, dependable, independent, and sense of humor). That is, Japanese in the failure condition did not show evidence of trying to compensate for their newly discovered shortcoming in creativity by bolstering their other self-assessments, nor did they show the tendency observed with the Canadian sample to discount the failure feedback that they had received. Rather, our Japanese sample adopted a more critical view that permeated other aspects of their self-evaluations—a tendency that could be labeled “reverse compensatory self-enhancement.” These results corroborate the notion from self-improvement theory (Heine et al., 1999; Heine et al., in press; Kitayama et al., 1997) that Japanese are highly sensitive to information indicating their weaknesses. This pattern of reverse compensatory self-enhancement has never been observed in published studies of North Americans.

Analyses were conducted to see whether Japanese estimates departed significantly from the 50% benchmark. Japanese showed evidence of self-criticism after failure (their estimates were significantly below 50%), $t(32) = -3.75$, $p < .001$, but not after success, $t(35) = -1.13$, *ns*.

It is possible that creativity may hold different value within the two cultural groups, and this might have affected the results. For example, many would suggest that Canadians value creativity more than Japanese. However, cross-cultural comparisons of values are notoriously unreliable as they are affected by both deprivation and reference-group effects (Peng, Nisbett, & Wong, 1997). In fact, as reported in Heine et al. (in press), cross-cultural comparisons of how greatly creativity was viewed as important for success in the two samples revealed that Japanese viewed creativity to be significantly more important than Canadians. Moreover, Japanese viewed creativity as more important when they had failed, whereas Canadians showed a nonsignificant trend to view it as more important when they had succeeded. Different patterns of compensatory self-enhancement results may emerge if feedback is given regarding domains that are of more or less importance to participants. That reverse compensatory self-enhancement has never before been observed among North Americans, even though studies have manipulated domains of considerable importance to participants (e.g., Baumeister & Jones, 1978; Steele et al., 1993), suggests that the Japanese pattern of results cannot simply be explained away by the reported greater importance of creativity.

DISCUSSION

In contrast to North American tendencies to respond to negative self-relevant information by discounting the feedback or by engaging in compensatory self-enhancement, the present data suggest that Japanese are especially sensitive and responsive to failure feedback. When

Japanese confronted information indicating that they were weak in creativity, they tended to report less positive self-evaluations in other unrelated domains than those who received success feedback. This tendency to cast a wide net of self-criticism in the face of failure was not observed in the Canadian sample, nor has it been observed in previous North American studies.

The present findings provide more evidence to suggest that SEM tactics may not be commonly employed by Japanese. In addition to the growing body of evidence indicating that Japanese, in comparison to North Americans, tend to be more self-critical (Heine & Lehman, 1999; Heine et al., 1999; Kitayama et al., 1997; Markus & Kitayama, 1991), exhibit fewer and weaker self-enhancing biases (Heine & Lehman, 1995, 1997a; Kashima & Triandis, 1986; Kitayama, et al., 1995), and display fewer self-affirming tendencies (Heine & Lehman, 1997a), it appears that Japanese demonstrate reverse compensatory self-enhancement tendencies. Taken together, the convergent pattern of evidence from these studies is consistent with the notion that Japanese are more likely to maintain self-critical views. Negative self-relevant information serves a functional purpose within Japanese culture (e.g., Heine et al., in press). It aids individuals in spotlighting the areas in which they need to make efforts to correct deficits. Self-improvement serves to aid Japanese in fulfilling their role obligations and thereby affirming their sense of belongingness with other group members. Negative information is less threatening to the Japanese self, and therefore there is not the same need to ward it off. To the contrary, Japanese seem not only to pay attention to negative self-relevant information but to take it very seriously indeed.

NOTES

1. The participants in this study are the same as those in Study 1 of Heine et al. (in press). The manipulation of success and failure was the same as in that study as well. The Heine et al. (in press) study focused on persistence in the face of success and failure in Japan and Canada.

2. This was qualified by a significant main effect for gender, $F(1, 67) = 4.12, p < .05$. Japanese men rated themselves as more creative ($M = 44.5\%$) than Japanese women ($M = 32.2\%$).

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