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# Self-Improving Motivations and Collectivism

## The Case of Chileans

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Much research reveals pronounced self-improving motivations among East Asians. A question remains whether similar patterns would emerge in non-Asian collectivist cultures. Research that has used self-report measures reveals mixed evidence regarding collectivist self-improvement. The present study assesses self-improving motivations among Chileans using a behavioral measure in a replication of an earlier experiment with Americans and Japanese by Heine and colleagues (2001). The results revealed that Chileans, like Japanese and unlike Americans, were more likely to switch tasks following success feedback than following failure feedback.

**Keywords:** *motivation; persistence; self-enhancement; Latin America*

Much cross-cultural research has explored how various self-relevant motivations diverge across cultural contexts. In particular, many researchers have investigated how self-enhancing and self-improving motivations emerge differently in some cultures. For example, there has been much research to show that East Asians tend to view themselves more critically than do North Americans (Heine, Lehman, Markus, & Kitayama, 1999). Recent meta-analyses reveal that these cultural differences in self-critical motivations are large and are consistently found (Heine & Hamamura, 2007; Heine, Kitayama, & Hamamura, 2007).

However, despite the regularity with which these cultural differences in self-evaluations emerge between North American and East Asian samples, it has not been clear whether similar evidence for more self-critical motivations would emerge among other collectivist groups. On one hand, some studies find clear evidence for more self-critical views among Mexicans (Tropp & Wright, 2003) and Native Americans (Fryberg & Markus, 2003) compared with North American samples. On the other, self-critical and self-improving motivations have not been identified among collectivist groups such as Israeli Druze (Kurman, 2001) and Maoris (Harrington & Liu, 2002).

Past research exploring self-critical and self-improving motivations among non-Asian collectivist groups have focused largely on self-report measures. However, comparisons of self-report measures across cultures are problematic for a number of reasons (see Heine,

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Lehman, Peng, & Greenholtz, 2002, for a review). Many of these problems can be avoided by exploring behavioral measures of self-motivations. In one example of such a behavioral study, Heine and colleagues (2001) contrasted the persistence motivations of Japanese and North Americans following an encounter with success or failure. The authors found a self-enhancing orientation among North Americans, where people persisted longer on a task if they had earlier received success feedback for that task than failure feedback. In contrast, Japanese exhibited a self-improving pattern, in which people persisted longer following failure than success feedback (for similar findings, see Oishi & Diener, 2003). We were interested in the kinds of results that might emerge if another collectivist culture was targeted. We selected Chile, which was identified by Hofstede (1980) as being one of the most collectivist countries in his large multinational survey (Chile scored 33rd out of 40 countries on individualism, compared with the United States [1st] and Japan [22nd]). Would Chileans continue to persist on a task after failure feedback, as did Japanese, or would they switch to a different task, as did Americans?

## Method

### Participants

A total of 61 students at Pontificia Universidad Catolica de Chile (33 females, 27 males, and 1 who did not report gender) participated in the study in return for experimental credit. The average age of the sample was 22.2 years.

### Procedure

The procedure of the study was conducted in exactly the same manner as was done for the Japanese and American samples in Study 2 from Heine et al. (2001). Participants were told that the purpose of the study was to investigate the relations between “pattern recognition” skills and emotional intelligence. They were first given a version of the Remote Associates Test (RAT; originally developed by Mednick, 1962), which they were told was a widely used and reliable measure of creativity. In the RAT, participants are shown three words and are asked to generate the one word that relates to the other three (e.g., *sleep*, *fantasy*, and *day* all relate to *dream*). Participants were informed that the experimenter would never see their responses. Participants graded their own RAT beyond the view of the experimenter and put the graded test in an envelope when they were finished.

We created many RAT items in Spanish and pretested them in a large class in Chile. We eliminated items that had multiple solutions and calculated the percentage of people who answered each of the remaining items correctly. Based on this pretest, we made 3 different versions of the RAT (10 items each). One version comprised mostly very difficult items that few people answered correctly. Another version comprised mostly very easy items that most people answered correctly. A third version comprised items ranging in difficulty and included some impossible items.

After participants had worked on the items for 8 min, the experimenter stopped the participants and gave them an answer sheet and a bogus distribution of the RAT performance results 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 they answered correctly and the corresponding percentile score. Participants in the failure condition received the difficult version of the RAT. The percentile distribution was skewed such that the vast majority of them discovered that they scored well below the 50th percentile. Participants in the success condition received the easy version of the RAT and an opposite skewed percentile distribution, with the vast majority discovering that they scored well above the 50th percentile. The experimenter was blind to the assignment of condition; that is, the experimenter did not know which version of the RAT the participant received. The participants put their completed materials into the envelope and signaled to the experimenter when they were finished.

The experimenter told them that the next phase of the study involved taking a test of emotional intelligence (EQ) on the computer. However, after starting the EQ program, the computer inexplicably crashed. The experimenter, acting confused and in somewhat of a panic, said that she or he would have to go find the professor to get a new file to make the computer work. The experimenter said that this could take a while and then gave the participants a sheet of paper that included two tasks. Participants were explicitly told that these tasks were not part of the study but that the participants were free to work on the tasks if they desired. On one side of a sheet of paper was the second set of RAT items. On the other side of the sheet was a geometric figure task (GFT), adopted from Feather (1961), in which participants were instructed to try to trace a figure without lifting their pencil or retracing a line. The participants were briefly shown the GFT as the experimenter was leaving, and they were told they could do whatever they liked to pass the time and that neither task was part of the experiment. From the observation room, the experimenter timed how long each participant persisted on each of the tasks (the participants often switched back and forth between the two) until the participant quit or had worked for a total of 20 min, whichever came first.

When the participants stopped persisting for 90 s, or had reached the 20-min maximum, the experimenter returned, apologized, and said that the professor was unavailable and the participants would not be able to take the EQ test. The participants were then given a follow-up questionnaire. After completing this questionnaire, the participants were probed for suspicion and thoroughly debriefed. All Chilean participants were run through the procedure in Spanish.

## Results and Discussion

### Preliminary Analyses

One participant assigned to the failure condition answered too many items correctly and thus received feedback counter to what she had been assigned. This participant was excluded from the final analysis. This left a final sample of 60 participants. All of the key analyses remained significant even if this one participant's data were included. There were no significant effects for sex or any significant sex by condition interactions.

Participants assigned to the success condition averaged 7.1 items correct, which corresponded to the 86th percentile. Those assigned to the failure condition averaged 4.5 items correct, which corresponded to the 31st percentile. Across conditions, there was a highly significant effect for number correct,  $F(1, 58) = 92.72, p < .001$ , and percentile feedback,  $F(1, 58) = 1589.80, p < .001$ .

## Persistence

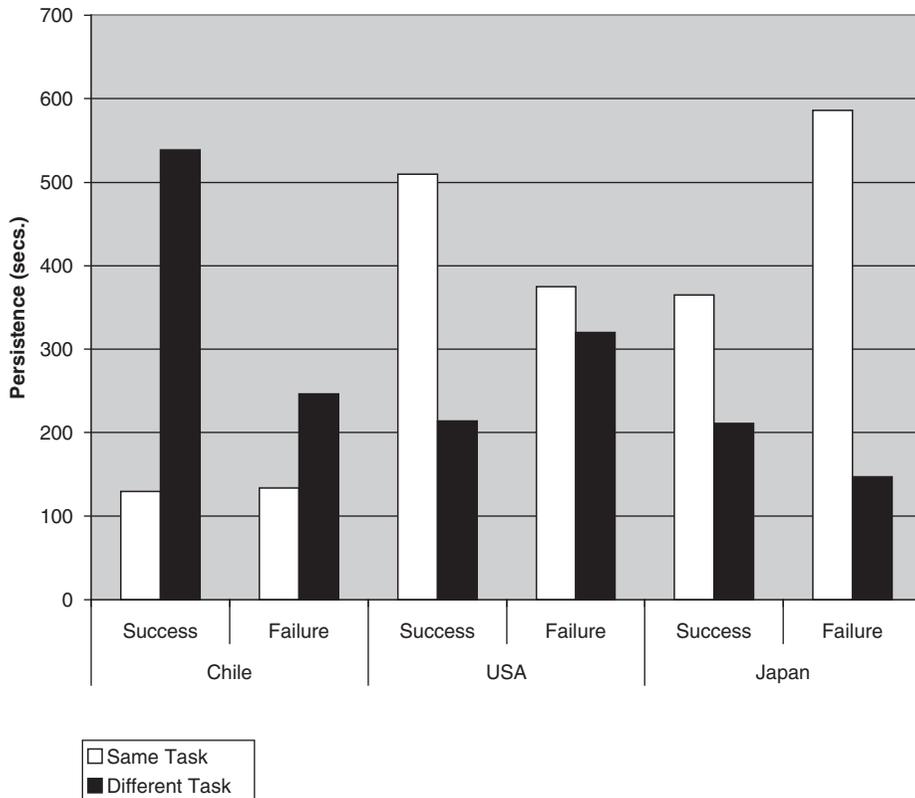
We explored how the Chileans' persistence was affected by the success and failure feedback. A repeated-measures analysis of variance (ANOVA) of persistence on the two tasks revealed a significant condition by task interaction,  $F(1, 54) = 10.07, p < .01$ . This interaction was followed up with simple effect analyses. An analysis of time spent on the RAT task revealed a null effect ( $F < 1$ ). Regardless of whether participants had received success feedback ( $M = 129.28$  s,  $SD = 132.17$  s) or failure feedback ( $M = 133.56$  s,  $SD = 141.37$  s), Chilean participants persisted to a similar degree. In contrast, an analysis of time spent on the GFT task revealed that Chilean participants who had failed on the initial set of RAT items were less likely to pursue the GFT task ( $M = 246.37$  s,  $SD = 274.07$  s) than were those who had succeeded ( $M = 538.72$  s,  $SD = 369.65$  s),  $F(1, 54) = 11.60, p < .001$ . Chileans thus preferred the GFT task over the RAT after succeeding more than they did after failing. That is, an experience with success on one task led Chilean participants to be more likely to switch to the alternative task compared with those who had failed.

A comparison with the American and Japanese data from Heine et al. (2001) is informative here. A repeated-measures ANOVA on the two tasks conducted on the combined three-culture sample revealed the predicted interaction between culture, condition, and task,  $F(2, 205) = 3.90, p < .05$  (see Figure 1). This interaction reveals the different patterns of responses that people from the three cultures had. First, as summarized by Heine et al. (2001), simple effect analyses revealed that Americans responded to success by persisting marginally longer on the RAT following success,  $F(1, 60) = 2.78, p = .10$ , whereas the Japanese persisted significantly longer on this same task following failure,  $F(1, 80) = 10.28, p < .002$ . This is in contrast to the Chilean pattern, in which persistence on the RAT was unaffected by success or failure feedback. That is, the Chilean pattern fell in between the patterns of the Americans and Japanese in their persistence on a task for which they received feedback. On this measure, the Chileans appeared intermediate in relation to the Americans and Japanese.

Second, regarding the persistence time on the GFT task, the observed significant Chilean pattern of persisting longer following success feedback on the other task paralleled the tendency observed among the Japanese (although the Japanese pattern was not significant,  $F < 1$ ) and stands in contrast to the nonsignificant trend for Americans to persist on the GFT task slightly longer if they had received failure feedback on the other task,  $F(1, 60) = 1.25, n.s.$  That is, Chileans, even more so than Japanese, preferred to switch tasks after receiving success feedback, indicating a self-improving tendency. Once they had successfully accomplished one task, they were especially likely to seek something else to direct their efforts. In contrast, the Americans showed a nonsignificant trend to prefer switching tasks upon receiving failure feedback. That is, there was a weak trend for Americans to respond to failure feedback by switching to a task that might be more likely to provide them with success.

In sum, although Chilean culture differs from both Japanese and North American cultures in many ways, a behavioral measure of self-improving motivations reveals a pattern that is more similar to the Japanese pattern than to the American one. Like Japanese, Chileans are more likely to switch to a new task after succeeding on another one than they are after failing. In contrast, Americans are more likely to switch to a new task following a failure experience than they are following a success. These findings suggest that clear

**Figure 1**  
**Persistence on Tasks Following Success or Failure**



Note: American and Japanese data are from Heine et al. (2001).

demonstrations of self-improving motivations in the face of failure are not limited to East Asian cultures, but may generalize to other collectivist cultures.

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