Culture, Dissonance, and Self-Affirmation

Steven J. Heine Darrin R. Lehman University of British Columbia

Within the framework of self-affirmation theory, the authors compared levels of dissonance reduction in the free-choice paradigm between a culture typical of an independent construal of self (Canadian) and a culture typical of an interdependent construal of self (Japanese). Whereas Canadian results virtually duplicated past self-affirmation findings with U.S. participants, Japanese results showed no dissonance reduction. This, the authors argue, is because such situations do not threaten core aspects of the interdependent self.

Dissonance theory has spawned more than 1,000 studies, making it one of the most important and fecund theories in social psychology (Cooper & Fazio, 1984). Interestingly, we know virtually nothing about its cultural boundaries.

Since its original proposition by Festinger in 1957, dissonance theory has been extensively refined and revised—the most notable shift in perspective being the nature of the thoughts that constitute dissonance. Festinger contended that cognitive dissonance is the uncomfortable inconsistency between two or more elements, typically between an individual's attitudes and behaviors. Theoretical revisions have led to an ego-based view of dissonance, in which the disturbing inconsistency is seen to lie between the individual's positive view of him- or herself and the cognition that he or she has done something potentially foolish or bad (see, e.g., Aronson, 1968; Greenwald & Ronis, 1978; Thibodeau & Aronson, 1992). By changing their original attitudes, individuals can make their behavior appear more in line with what would be expected from competent and adequate people, thereby reducing or eliminating the distressing dissonance.

Despite the formidable presence of dissonance theory in the literature, very little research has addressed whether dissonance reduction exists at a comparable level across cultures. In fact, some authors (e.g., Hiniker, 1969) have contended that individuals from certain cul-

tures might not experience dissonance. For example, Markus and Kitayama (1991) raised the possibility that those with an interdependent view of self (typical of Asian cultures) might not feel threatened when their behavior is inconsistent with their attitudes, thereby suggesting that dissonance would not be experienced. In the present research, we investigated whether such cultural differences in dissonance reduction could be empirically demonstrated.

Self-Affirmation Theory of Dissonance

Research by Steele and his colleagues on self-affirmation (Spencer, Josephs, & Steele, 1993; Steele, 1988, 1990; Steele & Liu, 1983; Steele, Spencer, & Lynch, 1993) has significantly advanced the ego-based view of dissonance. Self-affirmation theory proposes the existence of a self-system that serves to maintain a global image of self-integrity through frequent explanations and rationalizations to the self. This self-affirming, image-maintaining process is activated when an individual encounters information that threatens his or her positive view of self, and it is carried out until the threats are explained away and the individual's sense of overall adaptive and moral adequacy is restored. When an individual realizes, for

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PSPB, Vol. 23 No. 4, April 1997 389-400 © 1997 by the Society for Personality and Social Psychology, Inc. example, that he or she has undertaken an action or made a decision dissonant from what would be expected of a good and competent person, the self-system is activated and runs through its course until the threatening dissonance is rationalized.

Because the goal of this self-system is to maintain the perception of global self-integrity, individuals do not necessarily have to dismiss every self-image threat that they encounter. Rather, the self-system is quite flexible such that affirmations of completely unrelated aspects of the self are able to restore an individual's overall sense of adequacy (Steele, 1988). Threats to the self, then, may be acknowledged provided that one has access to other positive information about the self to restore one's integrity. For example, the photograph on a salesperson's desk of his loving family can heal the wound caused by his boss's insults, or the sting accompanying a rejected manuscript can be mollified by beating one's archrival in a tennis match. In short, a positive thought about oneself seems able to disarm other unrelated threats to the self.

Steele (1988) contends that the reason dissonance reduction is so clearly observable in the laboratory is that participants are given only one means to respond to the self-image threat aroused by the experimental task: to directly reduce the dissonance. If other avenues to restore their integrity are made available to participants, self-affirmation theory maintains that the dissonance would not need to be countered directly. That is, affirmations of the self unrelated to the dissonance task could effectively "shut off" the dissonance-reducing tactics that lie at the heart of dissonance theory.

Steele and his colleagues have garnered considerable empirical support for self-affirmation theory. For example, Steele and Liu (1983) demonstrated that dissonance-reducing attitudinal change in a standard forcedcompliance paradigm can be eliminated by the completion of a value scale consistent with participants' dominant value orientations. They reasoned that responding to the value scale affirmed important aspects of the participants' selves and hence allowed them to restore their self-integrity without addressing the specific threat of the dissonance task. In contrast, completion of the value scale for participants with different value orientations did not serve any self-affirming function for them and thus had no effect on their attitude change. The completion of relevant value scales has also been shown to eliminate self-image threats associated with unfavorable social comparisons (Tesser & Cornell, 1991).

Steele and his colleagues have obtained similar results using Brehm's (1956) free-choice dissonance paradigm. In this paradigm, participants are given a choice between two closely evaluated alternatives, which they rate both before and after their choice. Brehm argued that the

positive features of the nonchosen alternative and the negative features of the chosen alternative are dissonant with the participant's choice. Typically, participants will rationalize their decision by increasing their postchoice rating of their chosen alternative and/or decreasing their postchoice rating of their nonchosen alternative. Steele (1988) contends that this behavior, termed spreading the alternatives, occurs because participants are loath to accept the possibility that they have made a poor decision. Such acceptance would threaten their subjective perception of overall competence. Instead, participants are motivated to affirm themselves by reassessing their decision in ways that make it appear more sound. As in forced-compliance tasks, this rationalizing behavior can be eliminated by providing participants with a different means to affirm themselves. Steele and colleagues have been able to shut off the spread of alternatives by giving participants positive personality feedback (Steele et al., 1993) or, remarkably, by allowing science majors to wear a coveted lab coat (Steele, 1990). Participants rationalize their decisions only when they have no other clear means available to view themselves positively.

Steele and colleagues also propose that individual differences exist for self-affirmation (Spencer et al., 1993; Steele et al., 1993). They argue that the more positive one's general self-view, the more easily one will be able to recruit positive information about oneself to maintain a global sense of adequacy. Therefore, people with high self-esteem should be more resilient to specific self-image threats than those with low self-esteem. Persons with high self-esteem have greater access to selfaffirming resources and therefore do not need to rationalize threatening information (such as that encountered in dissonance tasks) as much as those with low selfesteem. In support of this, Steele et al. (1993) demonstrated that high-self-esteem participants showed less rationalization of their decisions in a free-choice task than did low-self-esteem participants, particularly when participants' attention had just been focused on their characterological resources by completing a self-esteem

Culture and Cognitive Dissonance

The more than 35 years of research on cognitive dissonance has demonstrated its robustness as a phenomenon. However, because the vast majority of these studies have been conducted in North America, it is difficult to ascertain whether similar results would obtain with non-Western samples. As cross-cultural psychologists (e.g., Bond, 1988; Triandis, 1989) have frequently shown, in many cases our social psychological theories do not generalize past our own cultural borders. Markus and Kitayama (1991) maintain that different psychological processes are often observed between cultures

because pronounced cultural differences exist in the way that the self is typically construed.

The prototypic construal of self for individuals living in North American culture is the independent view of self. It is characterized by a relatively bounded and autonomous sense of self that is subjectively distinct from others and the environment (Geertz, 1974/1984). The independent self is defined primarily by the individual's internal attributes and is perceived to be an inviolate entity, remaining unchanged across situations (Campbell et al., 1996). Importantly, behavior is seen to be under the control of the individual, arising from his or her inner repertoire of attitudes, feelings, and judgments (Markus & Kitayama, 1991; Triandis, 1989; Weisz, Rothbaum, & Blackburn, 1984).

In contrast, the representative construal of self for individuals living in Asian cultures is the interdependent view of self. It is characterized by an emphasis on the fundamental connectedness of the individual to others (Hamaguchi, 1985). Internal attributes are not seen as particularly diagnostic of the self and must be regulated for the individual to successfully achieve the primary cultural task of interdependence. The behavior of individuals is largely governed by situational constraints and obligations, and consequently, behavior is not typically viewed as an accurate reflection of the individual's thoughts and attitudes (Markus & Kitayama, 1991; Miller, 1984; Triandis, 1989).

The central thesis of the present research is that cognitive dissonance, as it has been investigated in the literature, is more likely to be experienced by North Americans, and thus they would be more likely to exhibit dissonance reduction than Asians (see also Markus & Kitayama, 1991). Because the identity of the independent self rests on a foundation of internal attributes, such as an individual's attitudes and opinions, any dissonance that is experienced involving these attributes is likely to be directed to the core of the self (see Aronson, 1968). Viewing one's attitudes as inconsistent with one's behaviors, or one's decisions as unsound, then, may pose a significant threat to North Americans' self-integrity. Such attributes are not likely to be easily compromised, and individuals should be motivated to go to great lengths to reduce the dissonance. Moreover, as the behavior of individuals with an independent view of self tends to be seen as arising from and being controlled by such self-defining inner attributes, behavior is perceived to be highly diagnostic of the actor. Dubious behavior, then, can be seen to directly implicate the actor's competence and thus produce psychological distress.

In contrast, the core of the identity of the interdependent self lies more within the individual's roles, positions, and relationships. Internal attributes are patently less relevant to such persons' identities. Hence inconsis-

tencies between one's attitudes and behavior, or thoughts that one may have made a poor decision, are likely to be relatively tangential to such an individual's self-identity. Furthermore, in contrast to those with an independent view of self, the behavior of those with an interdependent self is perceived to be more a function of the obligations and responsibilities conferred by the individual's roles and statuses. Behavior is thus less likely to be attributed to the actor's disposition than to situational demands (Miller, 1984). In general, then, "foolish" behaviors that imply incompetence for North Americans may be more likely to evoke situational explanations for Asians. In situations in which the behavior in question relates to internal attributes that are less significant for Asians, such as those employed in dissonance studies, the impact may be inconsequential indeed. Hence we would not expect conventional dissonance tasks to be particularly distressing for Asians, and we would anticipate that they would exhibit less dissonance reduction than North Americans.

The strongest test of the above hypothesis would involve a situation in which dissonance reduction is most likely to be observed. Steele et al. (1993) argue that dissonance reduction should be especially pronounced when an individual (North American) confronts an additional threat to the self, such as receiving negative personality feedback. Under these circumstances, the need to restore self-integrity is compounded and the motivation to reduce dissonance is exacerbated. To the extent that Asians do not experience dissonance in this context, however, they should not evidence dissonance reduction, even if they encounter a threat to the self in the form of negative personality feedback. Dissonance reduction would not be a viable avenue to restore the damage to their self-integrity inflicted by the feedback.

Cultural theory therefore predicts that in traditional dissonance paradigms, North Americans should show greater dissonance reduction than Asians, particularly when they receive feedback that is threatening to their self-images. Potentially running counter to this hypothesis is the finding from self-affirmation studies that people with low self-esteem exhibit greater dissonance reduction than do people with high self-esteem (Steele et al., 1993). That cross-cultural studies have consistently shown Asians (Japanese) to score significantly lower on self-esteem scales than North Americans (Bond & Cheung, 1983; Campbell et al., 1996; Mahler, 1976) raises the possibility that Asians might show greater dissonance reduction than North Americans. Clearly, however, any relation between self-esteem and dissonance reduction (or self-affirmation more generally) may very well be culture specific. Moreover, we believe that the notion that conventional dissonance tasks should not be

threatening to Asians will be the key to understanding their behavior in this context.

Past Dissonance Research With Asian Samples

Our review of the literature revealed that studies of cognitive dissonance and related processes that have been conducted with Asian samples have produced inconsistent results. Sakai and Ando (1980) obtained findings with Japanese participants consistent with dissonance theory in that participants who were to receive electric shocks based on the outcome of a roll of dice reported the shocks to be less painful when they shook the dice than when an experimenter did. That is, the participants who shook the dice themselves, and thus brought upon their own fate (although by chance), manifested greater dissonance reduction than those who viewed the shocks to be completely beyond their control. The boomerang effect of cognitive dissonance (the tendency to become more extreme in one's opinions after attempts to persuade a partner elicits the unexpected result of the partner becoming even more committed to the counterposition) has been observed in two studies conducted in Japan (Numakami, 1972; Shirai, 1974). However, Sakaki's (1984a, 1984b) investigations of this effect yielded results contradictory to the predictions of dissonance theory. Conceptual replications in Japan of Festinger and Carlsmith's (1959) peg-turning study also have been inconsistent. Yoshida (1977) and Takata and Hashimoto (1973) found some evidence that participants reported that a mundane task was less interesting if they received rewards or justifications; however, Yoshizaki, Ishii, and Ishii (1975) failed to demonstrate this effect in two separate studies. Yang (1972) found some inconsistent evidence for dissonance theory in Taiwan. Participants rated themselves on a list of 30 personality traits and were later presented with bogus ratings about themselves supposedly made by their classmates. Participants recalled the names of traits that were inconsistent between their own and their classmates' ratings, a finding supportive of dissonance theory; however, this same pattern was not obtained with respect to participants' recollections for the ratings of the traits.

Sanada and Norbeck (1975) observed the reactions of a doomsday cult in Japan both before and after the earthquake prophesied by their leader failed to materialize. Unlike Festinger, Riecken, and Schachter (1956), Sanada and Norbeck did not observe that this false prophecy led to deeper faith and proselytizing among cult members as a means of dissonance reduction. In fact, the Japanese leader of this cult responded to his failed prediction by unsuccessfully attempting to commit suicide and then later by disbanding the sect.

A number of investigations of forced compliance (the paradigm that perhaps best represents the backbone of dissonance theory; for reviews, see Cooper & Fazio, 1984; Thibodeau & Aronson, 1992) have been conducted with Asian participants, but none of these has yielded results consistent with dissonance theory. None of the studies that emerged in our literature search of forced compliance in Japan (Hirose & Kitada, 1985; Kudo & Mitsui, 1974; Monden, 1980; Sakai, 1981) have demonstrated the standard effects of increased attitude change under conditions of high choice. Similarly, Hiniker (1969) failed to obtain this pattern in his study of Chinese refugees living in Hong Kong. Our attention, however, was recently called to a study published in a small Japanese university journal (that did not appear in our literature review) that did show significant forced-compliance effects with Japanese participants (Takata, 1974), suggesting that these effects are not completely foreign to Asian participants.

Taken together, the majority of published studies employing Asian participants has produced findings at odds with dissonance theory. Although some evidence in line with dissonance theory has emerged, it is rare and inconsistent. In addition, given the tendency of journals to publish only statistically significant findings, it seems reasonable to assume that many unpublished studies have failed to demonstrate dissonance reduction with Asian participants.

Because all of the studies with Asian participants described above were conducted without a Western control group, it is possible that each failure to demonstrate standard dissonance phenomena was due to experimental artifacts. Cooper and Fazio (1984), in their review of dissonance research, suggested that a number of requirements must be met for dissonance reduction to be expected: For example, an aversive consequence to one's behavior must be anticipated, and participants must perceive themselves to have acted of their own volition. It is unclear whether both of these conditions were present in each of the aforementioned studies.

We sought to put cognitive dissonance theory to a more rigorous cross-cultural test in which members of two distinct cultures were run through an identical methodology. Our primary question concerned whether we could demonstrate that people from a culture characteristic of an interdependent view of self (Japanese) exhibit significantly less dissonance reduction than those from a culture typical of an independent view of self (Canadians).

The Present Study

We employed the classic free-choice dissonance paradigm (Brehm, 1956) used by Steele and his colleagues (Steele, 1990; Steele et al., 1993). We felt that this para-

digm would lend itself better to cross-cultural study than the forced-compliance paradigm because of the relative ease of equating the dissonance task across cultures. If we had asked participants to write counterattitudinal essays, for example, it would have been nontrivial to select issues of equal importance across cultures. The free-choice paradigm has participants make a choice that has an anticipated aversive consequence (viz., the participant's concern that he or she has made the wrong choice). As in nearly all other published studies of postdecision dissonance (e.g., Brehm, 1956; Gilovich, Medvec, & Chen, 1995; Knox & Inkster, 1968; Steele et al., 1993), we did not measure dissonance per se but, rather, inferred its existence by measuring dissonance reduction. Past research measuring dissonance arousal directly in such postdecision paradigms justifies this methodological simplification in the literature (Gerard, 1967).

We anticipated that Japanese participants would exhibit significantly less dissonance reduction (i.e., a smaller spread of alternatives) than Canadian participants. Moreover, we hypothesized that Japanese participants would not rationalize their decisions even when confronted with threatening information about themselves. Toward maximizing experimental control, we conducted the study in essentially an identical manner for both cultural samples, using the same materials and the same laboratory. We thus decided to recruit Japanese participants who were visiting Canada. The Canadian government allows Japanese younger than the age of 26 to obtain working-holiday visas in which they are permitted to spend up to 1 year in Canada. We exploited the fact that the most popular destination within Canada for working-holiday Japanese is Vancouver, and at any given time, hundreds of young Japanese are temporarily living there (Consulate General of Japan, Vancouver, personal communication, March 14, 1995).

One methodological advantage of the present study deserves note. As the vast majority of cross-cultural studies compare questionnaire responses across cultures, most obtained cultural differences can be challenged by a response-style interpretation. For example, if an argument can be made that people from Culture X tend to respond in a more modest or a more moderate manner than people from Culture Y, then researchers are challenged to show that any obtained differences between Cultures X and Y are not solely due to self-presentational differences (e.g., Heine & Lehman, 1995a, 1995b). Because the main dependent variable in this laboratory study was completely unobtrusive and could not conceivably be influenced by such self-presentational motivations, our confidence that any obtained cultural differences represent "true" differences increases.

METHOD

Overview and Design

The experimental design was closely modeled after Study 1 of Steele et al. (1993), with a few modifications. The experiment was presented to the Canadian participants as a marketing study investigating the relation between music preferences and personality. As a justification for specifically recruiting Japanese participants in Vancouver, Japanese participants were told that in addition to the above purpose the study also sought to investigate Japanese individuals' knowledge and tastes for Western music. Aside from (a) the language used throughout the study and in the written materials, (b) the experimenter, and (c) this single difference in the cover story, Canadian and Japanese participants were run in an identical manner. All participants were promised a free compact disc (CD) of their choice as compensation for their participation, which they were told would take approximately 1.5 hrs.

Participants were scheduled to come to our lab in small groups and were told the purposes of the study. Individually, they first completed a bogus personality measure entitled the Multi-Polar Integrative Personality Inventory (MPIPI) and then underwent a free-choice task. They initially rated the desirability of 10 CDs that they chose from a list of 40 available titles. After then ranking the CDs, they were offered a choice between their 5th- and 6th-ranked CDs as compensation for their participation. Finally, they rerated all 10 CDs. Participants could rationalize their decision by showing an increase in the desirability rating of their chosen CD and/or a decrease in their rating for their rejected CD. This change in the ratings, known as the spread of alternatives, was the primary dependent measure in the study. We also attempted to manipulate participants' feelings about themselves by giving them either positive or negative false feedback from the MPIPI. A control group that was not given any personality feedback was also included. This resulted in a 2 (Culture) \times 3 (Feedback) factorial design.

Participants

All participants were recruited by advertising a free CD for taking part in a marketing research study. Japanese participants were recruited by means of posters, ads in local Japanese newspapers, and public service ads on local Japanese television programs. All contact with Japanese participants was in Japanese. The ads limited participation to Japanese nationals who had been away from Japan for less than 2 years, who were between the ages of 18 and 30, and who were interested in Western rock and pop music. A total of 71 Japanese participants

responded; however, 4 participants were not included in the final sample because they did not complete the dependent measure, the data for 2 had to be discarded because they received the wrong forms, and 1 was not included because he lacked familiarity with the type of music used in the study. This left a final Japanese sample of 64 (38 females and 26 males).

Canadian participants were recruited by means of posters put up on campus. The Canadian ads restricted participation to those whose mother tongue was English, who were between the ages of 18 and 30, and who were interested in rock and pop music. A total of 71 Canadian participants responded, but 2 were not included for failing to complete the dependent measure, and the data for 3 had to be discarded for indicating to the experimenter that they intended to trade in their CD for a different one after the study. This left a final Canadian sample of 66 (24 females and 42 males). The 7 Japanese and 5 Canadian participants whose data were deleted were fairly evenly distributed across the three feedback conditions.

Procedure

We scheduled participants in groups ranging from four to six to come to the laboratory. There they were greeted by the experimenter (a Japanese female for Japanese participants and a Canadian female for Canadian participants). Before each session was run, the group of participants was assigned to be in either the control or the feedback condition. Participants in the feedback condition were randomly assigned to receive either positive or negative feedback. Participants were directed to individual cubicles, where they remained for the duration of the study.

Participants were first asked to complete the MPIPI on a computer-scored sheet. The MPIPI and all the other materials used in the study were translated into Japanese and then back-translated into English. Then, three translators met to discuss and resolve any inconsistencies in the translations. In an attempt to make the MPIPI seem important to both Canadian and Japanese participants, it was described as an efficient and reliable measure often used by companies to identify applicants who are able to work well with others. The MPIPI consisted of 80 general items gleaned from various personality measures. After completing the MPIPI, participants in the positive- and negative-feedback conditions were told that the tests would immediately be computer-scored so that they would be able to see their profiles before leaving the study. Participants in the control condition were not told anything about their profiles being scored.

Next, participants were presented with a list of 40 current rock and pop CDs that were on loan to our lab from a local music store. Great care was taken in con-

structing a list that would contain a wide variety of Western titles, popular to both Japanese and Canadians. Current Japanese and Canadian music magazines were scoured to ensure that each of the bands (e.g., Pearl Jam, Janet Jackson, R.E.M.) was popular in both countries. Participants were asked to cross off the CDs from the list that they already owned and then indicate the 10 CDs from the remaining list that they would most like to own. The experimenter brought each participant evaluation forms for their 10 selected CDs. The evaluation forms consisted of a picture of the CD, the song list, a number of marketing research-type questions, and the first part of the main dependent measure: a question asking them how much they thought they would like the CD. Participants indicated their responses by making a mark on an unmarked 118-mm line labeled Wouldn't like this CD at all at the left end and Would like this CD very much on the right. Participants were then asked to rank the 10 CDs in order of their relative desirability, with the most desirable CD as 1 and the least desirable CD as 10. When the experimenter returned, she told the participants that she would retrieve the available CDs from their selected list of 10 and that the participant would be able to choose one to take home with them. The experimenter also informed each participant in the feedback conditions that their profiles had been scored and presented them with a large envelope containing a graph identified by their participant number. The graphs were designed to look as official as possible to enhance their credibility.

Because we wanted to ensure that the feedback would be important to the Japanese participants, it consisted of a profile of mostly interdependent qualities. Wishing to maximize the comparability of the results between cultures, Canadians received the identical feedback as the Japanese. We assumed that Canadian participants would be affected by any feedback that implicated the individual, whether it was of an independent or an interdependent nature. As will be shown later, this interdependent personality feedback had the desired effect on Canadians.

The graphs conveyed participants' percentile scores with respect to 10 positively valenced traits that were assumed to be key values for the interdependent self based on descriptions by cultural psychologists and Japanese anthropologists (De Vos, 1985; Hamaguchi, 1985; Lebra, 1976; Markus & Kitayama, 1991; Triandis, 1989): loyal, considerate, modest, cooperative, persevering, dependable, cautious, tolerant, patient, and adaptable. Participants in the positive-feedback condition could see that, averaged across the 10 traits, they scored better than 85% of Canadians/Japanese, whereas participants in the negative feedback condition scored better than only 25% of Canadians/Japanese. Control group participants did not receive any feedback.

After having several minutes to view their feedback (the control participants read magazines during this time), the experimenter approached each participant with two CDs to choose from for their compensation. The experimenter explained that our stocks were currently low and that only two of their top-ranked CDs were available. To ensure that they were making a choice between two closely valued alternatives, participants were given their 5th- and 6th-ranked CDs to choose from. This also increased the chances that their ratings were close to the middle of the scale, allowing for movement between their pre- and postchoice ratings. Because participants were being run in small groups and we had only one copy of each of the 40 CDs in our stock, in some cases, two or more participants' 5th- or 6th-ranked CDs overlapped with each other. In these cases, participants received adjacently ranked CDs that were as close as possible to their 5th- and 6th-ranked choices (e.g., 3rdand 4th-ranked, or 6th- and 7th-ranked), and whenever possible, they received more positively, rather than less positively, ranked CDs.

Next, participants were given a filler questionnaire containing demographic information as well as other marketing research-type questions. After several minutes had passed (to ensure that participants would have enough time to justify their choice; Walster & Festinger, 1962), participants were given an alphabetized list of the 10 CDs that they had originally evaluated and were asked to indicate how much they thought they would like each CD in an identical manner to their prechoice ratings. The difference between participants' ratings on this question and on the corresponding prechoice question for the two CDs they received constituted the main dependent measure. Lastly, participants in the positiveand negative-feedback conditions answered three questions about their perceptions of the personality test feedback. They were asked on 5-point Likert-type scales how positive their feedback was (a manipulation check; from 1 = Mostly Negative to 5 = Mostly Positive), how they felt after viewing their feedback (from 1 = Very Bad to 5 = Very Good), and how accurate they felt the test was (from $1 = Not \ at \ all \ Accurate to 5 = Very \ Accurate$). Participants were then reunited with the rest of the members of their session and probed for suspicion. Not a single participant expressed any awareness that we were interested in comparing their pre- and postchoice ratings of the CDs. Participants were then extensively debriefed. Participants in the feedback conditions were assured, at great length, that the results of the personality test had no relation to their actual personalities. Finally, participants were thanked and presented with a \$13 gift certificate for a CD of their choice from a local music shop in exchange for the CD that they had selected.

RESULTS

Composition of the Samples

All Japanese participants were Japanese-born and of Japanese parents. The median length of time spent outside of Japan was 4 months, with a range of 2 weeks to 5 years. Although we had originally requested participants to have only been out of Japan for less than 2 years, five participants indicated that they had been out of Japan for more than 2 years. Of the Canadian participants, 61 were born in North America, whereas each of the remaining 5 indicated that they had lived in Canada for at least 14 years. All participants were included in the analyses.

A few differences emerged with respect to the background of the two samples. The Japanese sample (M=22.8 years old) was significantly older than the Canadian sample (M=21.5), F(1,128)=6.02, p<.02. Also, 86% of the Canadian sample were students (n=57) compared with 75% (n=47) for the Japanese. The remaining participants were either employed or tourists. These proportions were marginally different, $\chi^2(1, N=129)=2.87$, p=.09. Correlational analyses, however, revealed that neither of these two variables was related to the main dependent variable of the spread of alternatives within either culture (all n between -.01 and 0.03, ns).

The Canadian sample consisted of 36% females (n = 24) compared with 59% (n = 38) for the Japanese. These proportions are significantly different, $\chi^2(1, N = 130) = 6.94$, p < .01, and as this variable (coded as 1 for females, 2 for males) did significantly correlate with the spread of alternatives for Japanese, r = -.30, p < .05, although not for Canadians, r = .01, ns, it was included as a covariate in the main cross-cultural analysis.

Cultural Differences in Procedure and Interest in the CDs

Participants were scheduled to come to the lab in groups of four to six people. Of the participants, 76% were run in groups of these sizes. However, because some participants did not show up at the scheduled time and because some unexpectedly brought along friends, the sizes of the groups actually ranged from one to eight participants. Because of the difficulty and expense of obtaining and running participants, all participants that showed up were included in the study. The average size of the groups run did not differ between Japanese (M = 4.38) and Canadians (M = 3.79), F(1, 33) = 1.28, ns.

Interest in any obtained cross-cultural differences in the spread of alternatives would be reduced if it could be shown that the CDs were of more value to the participants in one culture than the other and that this factor related to the spread of alternatives. It seems reasonable to speculate that decisions might be rationalized less for

less desirable objects. Two measures in this study relate to the overall desirability of the CDs. The first is the average prechoice desirability ratings that participants made on the 118-mm line for the two CDs they received. Canadians (M = 78.17 mm) indicated that they desired the CDs significantly more than did the Japanese (M = $63.24 \,\mathrm{mm}$), F(1, 128) = 25.97, p < .001. It should be noted that past research has shown that Japanese tend to exhibit a moderacy bias, responding more toward the middle of scales (Chen, Lee, & Stevenson, 1995; Stening & Everett, 1984; Zax & Takahashi, 1967), and it is conceivable that this may account for the difference. A second variable that relates to the overall desirability of the CDs is the number of CDs from the initial list of 40 that participants already owned. This seems like a reasonable proxy for how motivated participants were to actually go out on their own and buy the CDs used in the study. Canadians (M = 4.81) reported owning slightly more of the CDs than did the Japanese (M = 3.84), although this difference was not significant, F(1, 127) = 2.23, p > .10. Correlational analyses revealed, however, that neither of these two variables was related to the spread of alternatives within either culture (rs between -.16 and .09, all ps > .19).

Effect of the Personality Test Feedback

The manipulation check about the positivity/negativity of their feedback revealed that participants from both cultures understood their personality feedback, Ms = 4.86 and 2.00 for Canadians in the positive and negative conditions, respectively, F(1, 41) = 118.09, p < .001, and the corresponding Ms for Japanese were 4.36 and 1.52, respectively, F(1, 41) = 103.49, p < .001. There was no significant Culture \times Condition interaction, F < 1, but, interestingly, Canadians stated that their feedback was more positive than did the Japanese in the positive-feedback condition, F(1, 42) = 4.88, p < .04, and slightly, though not significantly, more positive in the negativefeedback condition as well, F(1, 40) = 2.31, p < .14. This may be owing to a relative tendency for North Americans, more so than the Japanese, to view themselves positively (Heine & Lehman, 1995a; Heine, Lehman, Kitayama, & Markus, 1997; Kitayama, Markus, & Lieberman, 1995).

Both Canadian and Japanese participants reported feeling better about their personality feedback in the positive than in the negative conditions: Ms = 4.18 and 2.71 for Canadians in the positive and negative conditions, respectively, F(1, 41) = 40.27, p < .001, and the corresponding Ms for the Japanese were 4.18 and 2.29, respectively, F(1, 41) = 44.54, p < .001. There was no significant Culture \times Condition interaction, F(1, 82) = 1.37, p > .20. Canadian and Japanese participants re-

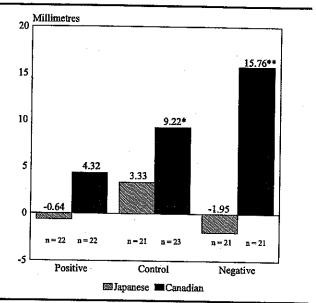


Figure 1 Spread of alternatives as a function of culture and personality test feedback.

*p < .05. **p < .01.

ported feeling equally good in the positive-feedback condition, F < 1, whereas Japanese participants reported feeling slightly, although not significantly, worse than Canadians in the negative-feedback condition, F(1, 40) = 2.52, p < .12. Hence Japanese participants reported feeling at least as affected by the personality feedback as did Canadians.

Finally, both the Canadians and Japanese viewed the personality test to be more accurate when they were in the positive than in the negative condition, Ms = 3.45 and 1.81 for Canadians in the positive and negative conditions, respectively, F(1, 41) = 41.55, p < .001, and the corresponding Ms for the Japanese were 3.41 and 2.70, respectively, F(1, 40) = 6.69, p < .02. There was a significant Culture × Condition interaction, F(1, 81) = 6.25, p <.02, which simple effects analyses revealed was primarily the result of Canadians believing the negative feedback significantly less than did the Japanese, F(1, 39) = 10.76, p < .01. As discounting has also been described as a mechanism of dissonance reduction (Festinger, 1957), this tendency for Canadians to be more reluctant than the Japanese to believe the negative personality feedback may likewise reveal a cultural difference in dissonance reduction.

Cultural Differences in Dissonance Reduction

Our primary prediction in this study, that dissonance reduction would be significantly attenuated for the Japanese, was clearly supported. A 2×3 factorial ANOVA revealed a significant main effect for culture, F(1, 124) = 8.99, p < .004. Moreover, statistically controlling for the

cultural difference in the proportions of gender via an ANCOVA enhanced the magnitude of the effect, F(1, 123) = 12.18, p < .001.

Three alternative explanations for this cultural difference in dissonance reduction deserve consideration. First, perhaps the Japanese were simply more accurate than the Canadians in recalling their prechoice estimates, thereby obscuring any dissonance-reducing tendencies. Second, perhaps the previously documented Japanese moderacy bias (Chen et al., 1995; Stening & Everett, 1984; Zax & Takahashi, 1967) precluded their responses from moving much from the middle of the scale. Both of these alternative accounts predict that the variance in the spread of alternatives would be significantly less in the Japanese than in the Canadians; however, a comparison of the variability of the spread of alternatives between cultures revealed no difference between cultures, F(63, 65) = 1.13, ns, $s^2 = 351.7$ and 310.0for the Japanese and Canadians, respectively. Japanese postchoice estimates deviated from their prechoice estimates as much as they did for Canadians, yet unlike those for Canadians, Japanese postchoice estimates were not systematically in the direction of dissonance reduction. A third alternative explanation is that more Japanese than Canadian participants made their CD selection simply on the basis of their prechoice ratings; that is, in an automatic way, they chose the CD with the higher prechoice ranking. Without questioning whether they made the correct choice, it is conceivable that dissonance would be less likely to be experienced. Undermining this third alternative account, however, a comparison of the percentage of participants whose decision was consistent with their preliminary evaluation revealed no difference between cultures: 59% and 52% for the Japanese and Canadians, respectively, $\chi^2(1, N=130) < 1$, ns.

Spread of Alternatives Between Feedback Conditions

With respect to the various feedback conditions, the results for Canadians replicated past research on selfaffirmation. As Figure 1 shows, in the control condition Canadians showed a significant spread of alternatives, t(22) = 2.47, p < .03. This replicates earlier studies with North American participants (e.g., Brehm, 1956; Gerard, 1967; Steele, 1990; Steele et al., 1993). When provided with a means to affirm themselves through positive personality feedback, however, Canadians' spread of alternatives was no longer significant, t(21) = 1.45, p > .20. When confronted with threatening information about themselves by way of negative personality feedback, Canadians showed an even more pronounced spread of alternatives than in the control condition, t(20) = 3.71, p < .002. Comparing across feedback conditions, Canadians showed a significantly larger spread of alternatives in the negative condition than in the positive condition,

F(1, 41) = 4.94, p < .04. Hence, replicating the findings of Steele et al. (1993) and supporting self-affirmation theory, the personality feedback had a significant effect on Canadian participants' spread of alternatives.

The Japanese results diverged considerably from this pattern. The Japanese did not exhibit a significant spread of alternatives for any of the three conditions, all $t \le 1.1$, and their spread of alternatives was unaffected by feedback condition, $F \le 1$ between positive- and negative-feedback conditions. Regardless of how Japanese participants were made to feel by the personality feedback, then, they did not show any tendency to rationalize their choices.

DISCUSSION

The present results demonstrate that those from a culture characteristic of an interdependent view of self (Japanese) do not rationalize their decisions within the free-choice paradigm. Whereas the Canadian results virtually duplicated Steele and colleagues' (Steele, 1990; Steele et al., 1993) past self-affirmation findings with U.S. participants, the Japanese did not exhibit any of the markers of this behavioral pattern. Even when confronted with feedback threatening to their self-integrity (the condition that resulted in the most dissonance reduction for Canadians), Japanese participants did not rationalize their choices. This was so even though they reported feeling at least as bad as Canadians after viewing the negative feedback, and they believed that this feedback was more accurate than did Canadians. Dissonance reduction (at least within the free-choice paradigm) does not appear to be a viable means for the Japanese to counter threats to their selves.

As the past Asian literature (e.g., Hiniker, 1969; Hirose & Kitada, 1985; Kudo & Mitsui, 1974; Monden, 1980; Sakai, 1981; Takata, 1974) similarly demonstrates that the Japanese and Chinese rarely exhibit forced-compliance dissonance effects, a reasonable working assumption is that dissonance effects are, at least in some important ways, culturally constructed. Along with the myriad conditions necessary to observe dissonance reduction in forced-compliance and free-choice paradigms summarized by Cooper and Fazio (1984), we would add that the sample should not be from a culture representative of the interdependent view of self.

The present findings are consistent with our argument that making a difficult choice and the accompanying concerns that the choice was not optimal are simply not as psychologically threatening to the Japanese. We contend that, unlike those with an independent view of self, the possibility that one has made a poor decision may not implicate core aspects of identity for the interdependent self. We base this on the notion that internal attributes are less self-defining for the interdependent

self than are the individual's relationships, roles, and statuses (Markus & Kitayama, 1991). The possibility that such an individual has made a poor decision would not pose a significant threat to their cultural criteria of selfhood (i.e., maintaining a sense of belongingness and interpersonal harmony with others) and would not be distressing to them. That decisions are relatively less important to the Japanese than North Americans is a point frequently observed by cross-cultural scholars. For example, the Japanese psychiatrist Takeo Doi (1971), on his first trip to the United States, was surprised how hosts entertaining their guests asked them a barrage of "trivial" questions about their preferences-for example, whether they would like to sit in the dining room or on the deck, whether they would like coffee or tea, with or without cream and sugar, and so forth-questions to which Doi's own reaction was "I couldn't care less" (p. 12). Doi hypothesized that these questions were ways for North Americans to be courteous by allowing their guests to exercise their freedom of choice. For Japanese, Doi felt that hosts were more likely to attempt to size up the situation and to help their guests by taking care of things themselves, thus not burdening their guests. This example nicely reflects the possibility that expressing personal choice is not as important for the Japanese as it is for North Americans.

An additional point that we have raised is that the situational constraints regulating the behavior of the Japanese may render their actions less diagnostic of themselves (Markus & Kitayama, 1991; Miller, 1984). Without a clear link between behavior and disposition, potentially "foolish" behaviors should not implicate Japanese individuals' competence to the same extent as they do for North Americans, thereby reducing the pressure to explain these away. Situational factors, for example, in this study the fact that participants were required to choose between two CDs that were rated more or less equally desirable, a clearly difficult task, may absorb more of the negative implications associated with Japanese participants' choices than they did for North Americans.

Future Directions

The experimental task employed in the present study can be construed as an independent version of dissonance. That is, potentially making a wrong or foolish choice can be seen as dissonant with independent aspects of an individual's self-concept, such as his or her abilities to make sound decisions. It is possible that a different pattern of results would obtain for the Japanese if the experimental task led participants instead to perceive something as dissonant with interdependent aspects of their selves, such as an individual's sense of belongingness. For example, if Japanese participants

could be made to freely choose, say, to not help their parents, a task clearly opposed to interdependent ideals, then perhaps a more meaningful sense of dissonance would be evoked (to the extent that this phenomenon could still be called dissonance), and they might then show evidence of some kind of dissonance reduction.

A similar argument could be made for the case of self-affirmation. Steele and colleagues argue that dissonance reduction is a means by which individuals can restore their damaged self-integrity. Although the Japanese did not rationalize their decisions in the face of threatening personality feedback, it is possible that they would try to self-affirm in other ways. Steele (1988) contends that rationalizing one's decisions is a tactic to affirm one's competence and adequacy-a goal that is arguably more important within Western cultures in which the cultural ideals require individuals to be independent and self-sufficient (Heine et al., 1997; Markus & Kitayama, 1991; Sampson, 1977). It is possible that the Japanese would attempt to affirm interdependent aspects of themselves to counter threats to the self if such means were provided. For example, after viewing negative personality feedback challenging their ability to follow their cultural mandate, the Japanese may feel more motivated to engage in interdependent activities, such as helping a friend prepare for a move. That is, it is possible that the Japanese may have similar motivations to North Americans to restore a sense of self-integrity, yet the routes they pursue to affirm themselves are different. On the other hand, it is also possible that the Japanese simply do not have distinct motivations for self-affirmation, because their culture, compared with Western cultures, places less value on maintaining a positive self-view, a notion that we propose elsewhere (Heine et al., 1997; see also Kitayama et al., 1995).

Clearly, in future studies it will be important to investigate explicitly how people from Eastern cultures respond to threats to the interdependent self. Yet, the operationalization of interdependent paradigms to study dissonance and self-affirmation in non-Western cultures remains a formidable methodological task. Social psychologists have become quite skilled in techniques to manipulate how an individual feels about him- or herself (Roese & Jamieson, 1993), but it remains a challenge to develop techniques to realistically manipulate individuals' perceptions of their most important relationships within a laboratory setting. Although such efforts would no doubt prove fruitful for deepening our understanding of the nature and motivations of the interdependent self, the first crucial task, it seems to us, is to succeed in developing the methodological machinery needed to create these interpersonally relevant laboratory contexts.

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