

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/229309770>

Cultural differences in self-verification: The role of naïve dialecticism

Article in *Journal of Experimental Social Psychology* · July 2009

DOI: 10.1016/j.jesp.2009.03.004

CITATIONS

28

READS

177

4 authors:



Julie Spencer-Rodgers

California Polytechnic State University, San Luis Obispo

34 PUBLICATIONS 1,249 CITATIONS

SEE PROFILE



Helen C Boucher

Bates College

21 PUBLICATIONS 603 CITATIONS

SEE PROFILE



Kaiping Peng

Tsinghua University

113 PUBLICATIONS 4,934 CITATIONS

SEE PROFILE



Lei Wang

Peking University

821 PUBLICATIONS 21,813 CITATIONS

SEE PROFILE

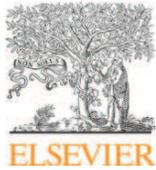
Some of the authors of this publication are also working on these related projects:



commitment to change [View project](#)



Relational self [View project](#)



Contents lists available at ScienceDirect

Journal of Experimental Social Psychology

journal homepage: www.elsevier.com/locate/jesp

Reports

Cultural differences in self-verification: The role of naïve dialecticism

Julie Spencer-Rodgers^{a,*}, Helen C. Boucher^b, Kaiping Peng^{c,d}, Lei Wang^e^a Department of Psychology, University of California, Santa Barbara, CA 93106, USA^b Department of Psychology, Bates College, Lewiston, ME 04240, USA^c Department of Psychology, University of California, Berkeley, CA 94720, USA^d Department of Psychology, Tsinghua University, Beijing 100084, China^e Department of Psychology, Peking University, Beijing 100871, China

ARTICLE INFO

Article history:

Received 13 February 2008

Revised 30 December 2008

Available online 31 March 2009

Keywords:

Self-concept

Self-verification

Dialecticism

Cross-cultural differences

East Asian cultural groups

Chinese cultural groups

ABSTRACT

This research presents the first evidence of cultural differences in self-verification and the role of naïve dialecticism in mediating these differences. Chinese, Asian-American, and non-Asian American students completed a series of personality tests, and were presented with bogus feedback that was either self-consistent or self-discrepant, and either positive or negative. Whereas non-Asians self-verified (i.e., tended to exhibit resistance), mainland Chinese and Asian-American participants tended to adjust their self-views when they received (either positive or negative) feedback that contradicted their prevailing self-conceptions. Mediated moderation analyses showed that naïve dialecticism, mediated cultural differences in self-verification.

© 2009 Elsevier Inc. All rights reserved.

According to self-verification theory (Swann, Rentfrow, & Guinn, 2003), the search for coherence is a fundamental human motive. Chronic self-conceptions and a coherent sense of self help people to see their life experiences and social world as stable and predictable. Through conscious and non-conscious processes, most people seek out social environments and interaction partners that uphold their chronic self-conceptions. They selectively attend to, interpret, encode, and retrieve from memory, information that reinforces their prevailing self-beliefs. These self-verifying tendencies are also moderated by global self-esteem and the valence of the self-relevant feedback, as most people are motivated to self-enhance and to view themselves in a positive light (Baumeister, 1998).

We suggest that the desire to verify one's global self-conceptions is indicative of Western folk epistemologies and modes of thinking. These epistemologies are largely based in Aristotelian logic (Lewin, 1951) and tend to emphasize stability, consistency, and the resolution of contradiction through integration and synthesis (Peng & Nisbett, 1999). Although modern self-theories posit that the working self-concept is malleable, multifaceted, and responsive to environmental stimuli (Baumeister, 1998), the Western global self-concept can be generally characterized by three central features: temporal/cross-situational consistency (stability

over time and contexts), internal consistency (congruence among its various aspects), and independence (an autonomous existence).

A growing body of research on culture and personality suggests that members of dialectical cultures (e.g., Chinese, Japanese, and Koreans, and to a somewhat lesser extent, Americans of East Asian background) are more likely to hold changeable and contradictory self-conceptions than are European-Americans (Boucher, Peng, Shi, & Wang, 2009; Choi & Choi, 2002; Kanagawa, Cross, & Markus, 2001; Spencer-Rodgers, Boucher, Mori, Wang, & Peng, 2009; Spencer-Rodgers, Peng, Wang, & Hou, 2004; Suh, 2002). According to the theory of naïve dialecticism (Peng & Nisbett, 1999; Spencer-Rodgers & Peng, 2004), the East Asian global self-concept can generally be characterized by three main qualities: change (flexibility and adaptability), contradiction (tolerance of opposites), and holism (interconnectedness with other people, material objects, and the metaphysical realm). Although Americans of East Asian descent may hold stable and internally consistent *context-specific* self-views (e.g., "self-at-school", "self-at-home"; English & Chen, 2007), the global self-concept or "personality" is less clearly and confidently defined (Campbell et al., 1996), stable (Kanagawa et al., 2001), and internally consistent (Spencer-Rodgers et al., 2009) among East Asians than North Americans.

In this paper, we briefly review previous research and present new evidence of cultural differences in the global self-concept. Our focus is on culture and personality because a vast literature indicates that global self-knowledge serves a central regulatory

* Corresponding author.

E-mail addresses: Rodgers@psych.ucsb.edu, Rodgers@berkeley.edu (J. Spencer-Rodgers).

function for the individual, both in terms of organizing past experience and directing thought, emotion, and behavior. *Personality* is a construct that has meaning and significance for scholars and lay people alike in a wide variety of cultures (Diener, Oishi, & Lucas, 2003). Moreover, cultural variation in the global self-concept has important implications for psychological health and well-being (Diener et al., 2003; Suh, 2002).

Heine and Lehman (1999) first documented that Japanese exhibit less congruence between the actual, ideal, and ought selves. Other scholars have found that Koreans describe themselves as having more conceptually contradictory personality traits and values (Choi & Choi, 2002) and view themselves more flexibly across situations (Suh, 2002). Chinese and Japanese exhibit greater explicit and implicit self-evaluative ambivalence (tolerance of positive and negative self-views; Boucher et al., 2009; Spencer-Rodgers et al., 2004) and contradiction in their spontaneous and implicit self-beliefs (Spencer-Rodgers et al., 2009) than do North Americans. Taken together, this research suggests that members of dialectical cultures hold more flexible and contradictory global self-conceptions than do members of non-dialectical cultures (see Spencer-Rodgers & Peng, 2004). Kanagawa et al. (2001) took this premise a step further and documented that Japanese actually describe themselves differently depending on the environment (e.g., when with a professor, a group, etc.).

One interesting question that remains unanswered is whether members of dialectical cultures tend to verify versus alter their global self-beliefs when presented with information that directly contradicts their prevailing self-conceptions. As outlined earlier, self-verification theory (Swann et al., 2003) posits that people possess a powerful need for self-consistency. Consequently, when European-Americans are presented with feedback that is self-discrepant, they tend to ignore or discount the feedback, and do not alter their self-beliefs (Swann et al., 2003). If the global self-concept is more malleable among East Asians (dialectical theory of change) and contradiction is tolerated (dialectical theory of contradiction), East Asians should be more inclined to adjust their self-conceptions in response to contradictory evidence.

Chen, English, and Peng (2006) recently examined the relationship between naïve dialecticism and self-verification. They found support for their hypothesis that individual differences in naïve dialecticism predict self-verifying behaviors. Americans high in dialecticism (as assessed by the Dialectical Self Scale [DSS]) tended to verify their negative, context-specific self-views. However, the authors did not find *cultural* differences in self-verification in their sample of Asian-American and European-American college students. One possible reason for this lack of significant cultural variation is that, although the participants were of different ethnicities, they shared a common nationality, and previous research has shown that Asian-Americans are only moderately more dialectical than are European-Americans, relative to Asians in East Asia (Spencer-Rodgers et al., 2004). The principal goal of the present study was to compare the self-verifying behaviors of prototypical dialectical (mainland Chinese) and non-dialectical (non-Asian American) cultures. Hence, to our knowledge, the current study is the first to present evidence of cultural differences in self-verification.

Study overview

In this study, mainland Chinese and American students completed a personality test and were presented with bogus feedback regarding their levels of extraversion. We then examined cultural differences in self-verification and the role of dialecticism in mediating these differences.

Conceptually contradictory feedback

Because temporal stability and cross-situational consistency are normatively prescribed in Western societies, most European-Americans actively seek out consistency and resist information that contradicts their prevailing self-conceptions (Sedikides & Green, 2000; Swann et al., 2003). If one's self-beliefs in a domain are important to the self-concept and are held with certainty, people tend to discount or reject information that is self-discrepant (Markus, 1977). They also may exhibit polarization or "boomerang" effects, and emphasize and elaborate their existing self-consistent judgments (Swann, Pelham, & Chidester, 1988). For instance, European-Americans who conceive of themselves as extraverted may strengthen or exaggerate their extraversion ratings on a second personality test, in response to disconfirming evidence indicating they are introverted.

In a seminal study, Markus (1977) showed that European-Americans may alter their self-judgments in response to contradictory evidence, if those beliefs are not central or important to the self-concept and are held without certainty. It is also possible that East Asians may alter their self-beliefs, not because they are more dialectical (i.e., tolerant of contradiction and change), but because they are less certain about who they are (Campbell et al., 1996). In previous research (Spencer-Rodgers et al., 2009), we found no support for the hypothesis that a lack of self-certainty gives rise to self-concept inconsistency among East Asians. Nevertheless, to address these concerns, our analyses were conducted using the total sample, as well as a subset of participants who reported high scores on extraversion (above the median); individuals who are likely to hold central and certain self-beliefs. Moreover, this personality dimension was selected because it is the most central self-aspect in both cultures, as it is the principal factor of both the Big Five (Costa & McCrae, 1992) and the indigenous Chinese Big Seven (Wang & Cui, 2003).

Negative feedback

The valence of the feedback may also influence whether people verify or adjust their self-beliefs. According to self-enhancement theories (see Baumeister, 1998), the need for positive self-regard implies that most people will ignore or reject feedback that is self-critical. Self-verification theory (Swann et al., 2003) also postulates that people will resist self-critical information, if their prevailing global self-views are positive. These self-enhancing and self-verifying tendencies are particularly pronounced in Western cultures, because highly favorable (Heine, Lehman, Markus, & Kitayama, 1999) and evaluatively consistent (Spencer-Rodgers et al., 2004) self-beliefs are culturally mandated. Because most European-Americans possess high self-esteem (Diener & Diener, 1995), European-Americans who are presented with negative personality information are likely to discount the feedback (Sedikides & Green, 2004) and not alter their self-beliefs, or will emphasize and elaborate their existing positive self-conceptions. In contrast, East Asians are generally more self-critical (Heine & Hamamura, 2007) and may more readily accept negative personality feedback. Thus, it is conceivable that East Asians will adjust their self-beliefs, not because they are more dialectical (i.e., tolerant of contradiction and change), but because they are more responsive to feedback that is disapproving.

To address this potential confound, we examined the potentially unique effects of valence and contradiction on self-verification, by explicitly manipulating both the social desirability and conceptual consistency of the feedback presented (i.e., participants received either positive [or negative] feedback that was consistent [or inconsistent] with the content of their self-beliefs). For exam-

Table 1
Personality feedback by condition.

Extraverts	Introverts	Example of feedback
Consistent-positive	Inconsistent-positive	You are very social and expressive...you enjoy large social gatherings... you are very energetic...you are assertive...it is difficult for people to push you around
Consistent-negative	Inconsistent-negative	You are very social...however, you frequently talk too much...you need constant stimulation...you cannot spend time alone...people may view you as too pushy
Inconsistent-positive	Consistent-positive	You are very quiet...you enjoy solitude...you can entertain yourself easily...you are comfortable spending time alone...people view you as strong, self-directed
Inconsistent-negative	Consistent-negative	You are very quiet...you sometimes lack energy...you may become lonely...you may be viewed by others as aloof, cold, and distant

ple, extraverts in the inconsistent/positive condition received positively-framed feedback indicating they were introverted (see Table 1). Notably, this methodology represents a departure from classic research on self-verification, in which valence and consistency are often confounded (e.g., for extraverts, “positive” feedback involves receiving extraverted feedback; “negative” feedback involves receiving introverted feedback).

Hypotheses

To summarize, we advanced the following predictions: (a) in the inconsistent/positive and (b) inconsistent/negative conditions, we anticipated that members of non-dialectical cultures (non-Asian Americans) would discount the feedback and not adjust their self-beliefs (i.e., show resistance) or would exhibit more extreme, self-consistent ratings (i.e., show polarization). In contrast, we expected that members of a prototypical dialectical culture (mainland Chinese) would adjust their self-judgments in the direction of the inconsistent feedback (i.e., exhibit self-concept change). Moreover, we anticipated that: (c) non-Asian Americans would be especially likely to exhibit resistance, whereas Chinese would be especially like to adjust, when presented with inconsistent/negative feedback, because it is both conceptually contradictory and self-critical. Because prior research has shown that Asian-Americans are moderately dialectical, relative to non-Asian Americans and mainland Chinese (Spencer-Rodgers et al., 2004), we expected them to emerge somewhere in the middle.

To provide direct support for our assertion that naïve dialecticism contributes to cultural differences in self-verification, we measured dialectical beliefs about the self via the DSS. We anticipated Chinese and Asian-Americans would score higher on the DSS than non-Asian Americans, and dialecticism would mediate cultural differences in self-verification.

Method

Participants

The 312 participants consisted of 161 Chinese students (100 women, $M_{age} = 22.3$) at Peking University who were paid 10 yuan (\$1) and 151 American students (91 women, $M_{age} = 19.8$) at UC Berkeley who participated for course credit. The ethnic composition of the US sample was: 81 Asian-Americans and 70 non-Asian Americans (45 European-Americans, 14 Hispanics/Latinos, 5 African-Americans, and 6 others).¹ Because previous research has

¹ All participants were categorized as either “introverts” (mean pretest scores ranging from 0 to 3.99) or “extraverts” (ranging from 4.0 to 7.0). Thus, participants were classified as introverted/extraverted on the basis of their objective pretest score, rather than a median split of the extraversion scale. All 312 participants completed the study. However, because there were so few introverts ($N = 56$) in the total sample, we did not have sufficient power to conduct a five-step regression analysis (with type of participant [extravert versus introvert] as a factor), and introverts were dropped following data collection.

shown that non-Asian American ethnic groups are relatively non-dialectical (Spencer-Rodgers et al., 2004), they were combined.

Procedure

Participants were brought into the lab in small groups and seated in isolated cubicles. They were told the researchers were developing several new personality tests, that they would be completing several instruments that day, and would be receiving the results of the tests as they completed them. Participants then completed the first personality test, which consisted of the DSS, the pretest items, and several measures unrelated to this study. The experimenter collected the questionnaires and returned to the control room to score them.

To determine which feedback form to give participants in the consistent/inconsistent conditions, participants were categorized as either extraverted (mean ≥ 4.0) or introverted (mean < 4.0) on the basis of their average scores on the pretest measure. (The midpoint 4.0 “neither” of the 1–7 scale was used as the cut off.) Participants were then randomly assigned to condition, and given a feedback form adapted from the Myers–Briggs Type Indicator (Myers, 1993).

Participants were given 5 min to review the results of the first test, at which point the experimenter retrieved the forms. Next, participants completed the second personality test, which consisted of the posttest measure. Participants then completed the final questionnaire, were debriefed, and thanked.

Measures

Pretest measure

Participants rated four extraversion items (e.g., “I really enjoy talking to people,” “I often feel as if I am bursting with energy”), on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. The English and Chinese versions of the items were selected from the NEO Five-Factor Inventory (NEO-FFI, Costa & McCrae, 1992) and the NEO-FFI in Chinese. The item-total correlations were somewhat low (in part, because they were embedded within the DSS). However, because the items come from well-established and reliable scales, they were averaged to create pretest scores. Cronbach’s alphas in the total sample were: .56 Chinese, .74 Asian-Americans, and .71 non-Asian Americans.

Naïve dialecticism

Dialecticism was assessed with the Dialectical Self Scale (Spencer-Rodgers et al., 2008), with the 32 items rated on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. Sample items include: “When I hear two sides of an argument, I often agree with both” and “I often find that my beliefs and attitudes will change under different contexts.” The DSS has been shown to possess adequate cross-cultural validity and reliability (Hamamura, Heine, & Paulhus, 2008; Spencer-Rodgers et al., 2008). Alphas were: .74 Chinese, .81 Asian-Americans, and .78 non-Asian Americans.

Posttest measure

To reduce suspicion, a somewhat different extraversion measure was used as the posttest. Participants rated five extraversion traits (e.g., talkative, energetic), on a 1 (*not at all characteristic*) to 9 (*very characteristic*) scale, which were embedded within a list of 49 traits. Alphas were: .73 Chinese, .80 Asian-Americans, and .81 non-Asian Americans.

Final questionnaire

To insure participants had read and encoded the feedback, as a manipulation check, they were asked to describe the feedback in their own words. They then completed a probe for suspicion and a demographics questionnaire.

Results

There were no main effects or interactions involving gender. Hence, gender is not discussed further.

Personality feedback

Because introversion feedback may be perceived as more socially desirable in East Asian than North American societies, the feedback was rated by a small group of participants (30 Chinese, 18 Asian-Americans, and 12 non-Asian Americans) and matched in terms of social desirability in each culture. The feedback was rated on a -4 (*very negative*) to $+4$ (*very positive*) scale, and there were no cultural differences across all four conditions.

Manipulation check

Four American and three Chinese participants provided ambiguous reports of the content and/or valence of the feedback received. Because the results were the same with and without these participants, they were retained.

Dialecticism

As predicted, an analysis of variance revealed a main effect of culture on dialecticism, $F(2, 253) = 14.81, p < .001$. Post-hoc analyses (Tukey HSD) showed that Chinese ($M = 4.04$) and Asian-Americans ($M = 3.90$) scored higher on dialecticism than did non-Asian Americans ($M = 3.59$), p 's $< .05$. Chinese and Asian-Americans did not differ significantly.

Multiple regression analyses

We conducted a four-step hierarchical regression analysis. The study employed a 3 culture (Chinese/Asian-American/non-Asian American) \times 2 consistency of feedback (consistent/inconsistent) \times 2 valence of feedback (positive/negative) design. Culture was represented using two dummy-coded vectors: Dummy 1 (0 = non-Asian Americans; 1 = Asian-Americans; 0 = Chinese) and Dummy 2 (0 = non-Asian Americans; 0 = Asian-Americans; 1 = Chinese), with non-Asians serving as the reference group. Consistency (0 = consistent; 1 = inconsistent) and valence (0 = positive; 1 = negative) were dichotomous variables. In all analyses, continuous predictors were centered at their means (Aiken & West, 1991).

To control for pretest extraversion, the pretest scores were entered at Step 1 of the regression, predicting posttest extraversion (unstandardized $b = 0.83, p < .001$). At Step 2, the main effects of culture (i.e., dummy1 and dummy2), consistency of feedback, and valence of feedback were entered. The effect of dummy2 was significant ($b = -0.75, p < .001$) and the effect of consistency approached significance ($b = -0.24, p = .053$). These main effects, however, were moderated by a significant interaction (described below). There was no main effect of valence, $t < 1$.

Next, the five two-way interaction terms (dummy1 \times consistency; dummy2 \times consistency, dummy1 \times valence, dummy2 \times valence, and consistency \times valence) were entered at Step 3. There

was a significant (dummy2 \times consistency) interaction ($b = -.63, p < .05$). None of the remaining interactions approached significance (all p 's $> .29$). Finally, at Step 4, we included the 2 three-way interaction terms (dummy1 \times consistency \times valence; dummy2 \times consistency \times valence). These interactions were not significant (p 's $> .18$). Because there were no significant interactions with valence, for the sake of simplicity, the results are presented collapsing across valence. Fig. 1 shows the posttest scores (controlling for pretest) for Chinese, Asian-Americans, and non-Asian Americans as a function of type of feedback.

Based on our a priori hypotheses, we conducted a focused comparison of the prototypical non-dialectical (non-Asian Americans) and dialectical (mainland Chinese) cultures (Aguinis, 2004; Rosenthal, Rosnow, & Rubin, 2000). As predicted, the slope for Chinese participants ($b = -0.52, p < .01$) differed significantly from the slope for non-Asian Americans ($b = 0.11, ns$), $t = 2.10, p < .05$. The slope for Asian-Americans ($b = -0.058, ns$) did not differ from that for Chinese participants, $t = 1.54, p = .12$, nor for non-Asian Americans, $t < 1$.

Although we controlled for pretest extraversion (and thus effectively "matched" the cultures on extraversion), it is important to note that because the pretest and posttest items come from somewhat different scales, we cannot make definitive statements regarding whether participants changed their self-views from time 1 to 2. Instead of focusing on within-participant changes, our analysis focused on (between-participant) differences between individuals who received inconsistent versus consistent feedback. If participants who receive inconsistent feedback show higher or similar posttest scores to those who receive consistent feedback, we have evidence of polarization or resistance (i.e., self-verification). If participants receiving inconsistent feedback show lower posttest scores, we have evidence of acceptance (i.e., *self-concept change*).

To summarize, after receiving inconsistent feedback, members of non-dialectical cultures (non-Asian Americans) self-verified: They rated themselves as slightly (but non-significantly) more extraverted on the second personality test than did non-Asian Americans who received consistent feedback. They tended to resist both positive and negative feedback that contradicted their prevailing self-conceptions. In contrast, members of the highly dialectical culture (Chinese) who received inconsistent feedback exhibited *self-concept change*: They rated themselves as significantly less extraverted on the second personality test, as compared to those Chinese participants who received consistent feedback. Moreover, they adjusted their self-judgments in the direction of the inconsistent feedback, regardless of whether the feedback was positive or negative. Asian-Americans, who are known to be moderately dialectical relative to non-Asian Americans and Chinese (Spencer-Rodgers et al., 2004), emerged in the middle:

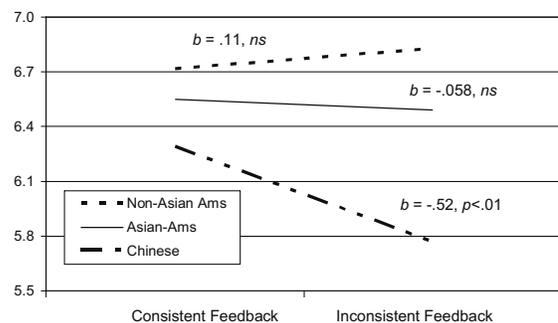


Fig. 1. Extraversion scores by culture and type of feedback. Note: Posttest extraversion scores (1–9 scale) controlling for pretest extraversion scores.

Asian-Americans who received inconsistent feedback rated themselves as slightly (but non-significantly) less extraverted on the second personality test than did those who received consistent feedback.

Mediational analyses

Mediated moderation analyses (Preacher, Rucker, & Hayes, 2007) were conducted using path analysis. Mediated moderation occurs when the interaction between two variables affects a mediator, which then affects a dependent variable. Because Chinese and Asian-Americans did not differ on the DSS and both tended to report lower posttest scores following inconsistent feedback, to reduce model complexity, they were combined. Hence, culture was a dichotomous variable (0 = non-Asians, 1 = Asians), as were consistency (0 = consistent; 1 = inconsistent) and valence (0 = positive; 1 = negative). The model (see Fig. 2) was tested controlling for pretest extraversion. The relationship between the predictor (culture \times consistency) interaction term and the mediator (dialecticism) was significant (path a), ($b = 0.47, p < .001$), as was the association between the mediator and posttest extraversion (path b), ($b = -0.24, p < .05$). A Sobel (1982) test revealed that the mediated, indirect effect ([culture \times consistency] \rightarrow dialecticism \rightarrow posttest extraversion) was significant, $z = 1.96, p < .05$.

Strong extraverts

In self-verification research, analyses are typically conducted with participants who possess well-established beliefs, attitudes, or behavioral habits in a domain (i.e., high initial scores on the dependent variable in question). Because there is no research participant pool at Peking University, we were unable to prescreen and recruit individuals who reported high scores on the pretest. Instead, we repeated our analyses with a subset of participants who scored above the median on extraversion (above Median = 5.25; note that extraversion scores ranged from 4.0 to 7.0 on the 1–7 pretest measure). This data set consisted of 67 Asians (50 Chinese, 17 Asian-Americans) and 40 non-Asians (26 European-Americans, 9 Hispanics, 1 African-American, and 4 others).

The overall pattern of results was the same: a hierarchical regression analysis revealed that the (culture \times consistency) interaction approached significance, ($b = -.63, p = .13$). None of the interactions with valence approached significance (p 's $> .42$). Path analyses indicated that the mediated, indirect effect of dialecticism on posttest extraversion was significant (Sobel test $z = 2.44,$

$p < .05$). The associations between the predictor (culture \times consistency) interaction term and mediator ($b = 0.49, p < .01$), and the mediator and posttest extraversion ($b = -0.52, p < .01$), were significant.

Discussion

Self-verification theory argues that people develop and strive to maintain chronic self-conceptions because they provide a sense of coherence and stability in their lives and interpersonal relationships. In accordance with this theory and prior research (Swann et al., 2003), the non-Asian American participants, who are non-dialectical (Spencer-Rodgers et al., 2004), tended to resist feedback that conflicted with their prevailing self-beliefs in the domain of extraversion. Notably, this pattern held for both inconsistent/positive and inconsistent/negative feedback. These results are compatible with both self-enhancement (see Baumeister, 1998) and self-verification (Swann et al., 2003) theories, which have shown that Westerners are motivated to hold positive, coherent self-views.

Based on the theory of naïve dialecticism, we expected to find cultural differences in self-verifying behaviors. If members of dialectical cultures possess more changeable and contradictory global self-conceptions, then Chinese (and to a somewhat lesser extent, Asian-American) participants should adjust their self-beliefs, rather than self-verify, when presented with contradictory evidence. East Asians also tend to be more self-critical than European-Americans (Heine & Hamamura, 2007), and may be more accepting of negative personality feedback. To examine the potentially unique effects of contradiction and valence on self-verification, we deliberately manipulated both the conceptual consistency and social desirability of the feedback presented to participants.

As predicted, Chinese participants who received contradictory feedback indicating they were introverted rated themselves as less extraverted on a second personality test, relative to Chinese participants who received consistent feedback. Rather than self-verifying, they exhibited *self-concept change*. Importantly, the same pattern of findings was found among strongly extraverted Chinese participants, individuals who presumably possess firmly-held beliefs in this domain. Moreover, the pattern of results was the same regardless of whether the feedback was positive or negative. This suggests that our findings are not attributable solely to Chinese being more self-critical than non-Asian Americans. If that were the case, one would expect that Chinese participants in the inconsistent/negative condition would have exhibited lower posttest scores (i.e., greater self-concept change) than those in the inconsistent/positive condition. Null effects are inherently difficult to interpret. Nevertheless, these results bolster our assertion that cultural differences in self-verification are due to dialecticism (i.e., tolerance of contradiction and change) and not simply to self-criticism.

Consistent with prior research showing that Asian-Americans are moderately dialectical, relative to European-Americans and mainland Chinese (Spencer-Rodgers et al., 2004), the Asian-American participants emerged in the middle: they rated themselves as slightly less extraverted on the second test. Taken together, the pattern of slopes (see Fig. 1) for non-Asian Americans, Asian-Americans, and Chinese (cultural groups that are known to differ systematically on the cultural variable of interest) is in accordance with our hypothesis that dialecticism gives rise to cultural differences in self-verification.

These findings make a significant contribution to the self-verification literature, as well as the culture and personality literature, by showing that members of dialectical cultures exhibit self-concept change in response to self-discrepant feedback. Not only do East Asians describe themselves differently depending on the context (Kanagawa et al., 2001; Suh, 2002), but they also are more

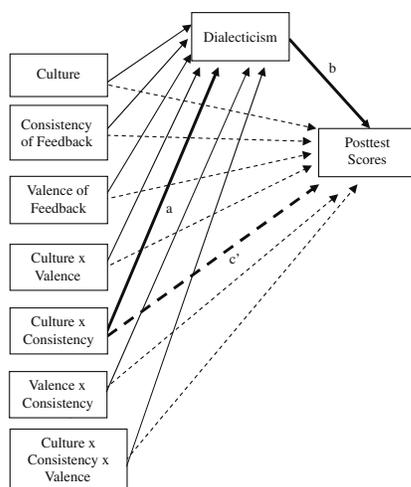


Fig. 2. Mediated moderation model. Note: Model tested controlling for pretest extraversion scores.

likely to shift their self-judgments when their prevailing views of themselves are challenged. These findings are noteworthy in that extraversion is the most central aspect of personality in both Chinese and North American cultures (Costa & McCrae, 1992; Wang & Cui, 2003). In addition, the results are unlikely to be due to cultural differences in self-certainty or susceptibility to experimenter demand, as we conducted a second set of analyses with participants who reported high scores on the pretest, and hence, were the least likely to alter their self-beliefs. One might also argue that our findings are due to cultural differences in self-esteem and the tendency for East Asians to accept self-criticism. However, in the moderated regression analyses, because the valence of the feedback was included as a separate factor, we effectively controlled for the valence of the feedback. Thus, tolerance for contradiction made a significant, unique contribution to our effects, above and beyond that which could be explained by valence/self-criticism. Lastly, the mediated moderation analyses showed that a direct measure of dialecticism mediated cultural differences in self-verification.

The limited research on the topic of culture and self-verification suggests that individuals high in naïve dialecticism are motivated to verify their (negative) context-specific self-views (Chen et al., 2006), but not, as evidenced in the present research, their (positive or negative) global self-views. If the global self is perceived as ever-changing and malleable, then it is reasonable to expect that highly dialectical individuals will possess fluid global self-beliefs, but seek to define or demarcate the self through context-specificity. An important avenue for future research would be to examine the relationship between contradiction in one's global and context-specific self-beliefs across cultures. For example, does dialecticism give rise to greater global self-concept inconsistency, which in turn, gives rise to greater flexibility and adaptability in one's behavioral repertoires and context-specific self-views? Alternatively, do members of dialectical cultures hold more contradictory global self-conceptions because of cultural norms and values, which encourage East Asians to behave more flexibly across situations (e.g., when at home, when at work, etc.)? Future studies are needed to elucidate the causal direction of this relationship. Another interesting question is whether there is greater congruence between global and context-specific self-beliefs among Americans relative to East Asians. And importantly, what consequences does the relationship have for psychological health and well-being? Suh (2002) found that identity inconsistency (in the global self-concept) has less serious mental health implications for Koreans than Americans. Does the same hold for congruence between the global and context-specific self?

This study is another important step in explicating culture-specific variation in the expression of the fundamental need for coherence. Past self-verification research argues convincingly that for members of non-dialectical cultures, having consistent self-beliefs is critically important in maintaining a sense of coherence (Swann et al., 2003). However, previous research has also indicated that a greater amount of inconsistent self-knowledge is stored in memory and is cognitively accessible among member of dialectical cultures (Spencer-Rodgers et al., 2009). In this study, the stimulus (inconsistent personality feedback) seems to have activated that self-knowledge and brought to mind more competing self-images, thus leading Chinese participants to alter their self-beliefs on a subsequent personality test. These findings also suggest that Chinese may attend more closely to contradictory self-relevant information than do non-Asian Americans, who may be more likely to ignore or discount self-discrepant information. Self-verification research has further shown that people deliberately seek out environments that bolster, and purposively avoid, those that disconfirm their self-beliefs (Swann et al., 2003). There may be interesting cultural differences in self-verification strivings and other manifestations of the need for coherence.

Acknowledgments

We greatly appreciate the comments of Serena Chen, Nanoy Collins, Melissa Williams, Sara Gorchoff, and Lindsay Shaw-Taylor. This research was supported by NIMH grant MH72680 (awarded to Peng and Spencer-Rodgers) and a UC Berkeley Institute of East Asian Studies fellowship (awarded to Boucher). We also thank Jiangqun Liao, Lu Gan, Nicky Newton, Xiao He, Yueyi Huang, Sarah Ford, and Sandy Tsang for their invaluable research assistance and Virginia Kwan for the Chinese translation of the NEO-FFI.

References

- Aguinis, H. (2004). *Regression analysis for categorical moderators*. New York: Guilford Press.
- Aiken, L., & West, S. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Baumeister, R. (1998). The self. In D. T. Gilbert & S. Fiske, et al. (Eds.), *The handbook of social psychology* (4th ed., Vol. 2, pp. 680–740). New York: McGraw-Hill.
- Boucher, H. C., Peng, K., Shi, J., & Wang, L. (2009). Culture and implicit self-esteem: Chinese are “good” and “bad” at the same time. *Journal of Cross-Cultural Psychology*, 40, 24–45.
- Campbell, J. D., Trapnell, P., Heine, S. J., Katz, I., Lavallee, L., & Lehman, D. (1996). Self-concept clarity: measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology*, 70, 141–156.
- Chen, S., English, T., & Peng, K. (2006). Self-verification and contextualized self-views. *Personality and Social Psychology Bulletin*, 32, 930–942.
- Choi, I., & Choi, Y. (2002). Culture and self-concept flexibility. *Personality and Social Psychology Bulletin*, 28, 1508–1517.
- Costa, P. T., & McCrae, R. (1992). *Revised NEO personality inventory and NEO five-factor inventory professional manual*. Odessa, FL: Psychological Assessment Resources.
- Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68, 653–663.
- Diener, E., Oishi, S., & Lucas, R. (2003). Personality, culture, and subjective well-being. *Annual Review of Psychology*, 54, 403–425.
- English, T., & Chen, S. (2007). Culture and self-concept stability: consistency across and within contexts among Asian Americans and European Americans. *Journal of Personality and Social Psychology*, 93, 478–490.
- Hamamura, T., Heine, S., & Paulhus, D. (2008). Cultural differences in response styles: the role of dialectical thinking. *Personality and Individual Differences*, 44, 932–942.
- Heine, S. J., & Hamamura, T. (2007). In search of East Asian self-enhancement. *Personality and Social Psychology Review*, 11, 4–27.
- Heine, S. J., & Lehman, D. (1999). Culture, self-discrepancies, and self-satisfaction. *Personality and Social Psychology Bulletin*, 25, 915–925.
- Heine, S. J., Lehman, D., Markus, H., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, 106, 766–794.
- Kanagawa, C., Cross, S. E., & Markus, H. (2001). “Who am I?” The cultural psychology of the conceptual self. *Personality and Social Psychology Bulletin*, 27, 90–103.
- Lewin, K. (1951). *Field theory in social science*. New York: Harper.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35, 63–78.
- Myers, I. (1993). *Introduction to type: A guide to understanding your results on the Myers-Briggs type Indicator*. Palo Alto: Consulting Psychologists Press.
- Peng, K., & Nisbett, R. E. (1999). Culture, dialectics, and reasoning about contradiction. *American Psychologist*, 54, 741–754.
- Preacher, K., Rucker, D., & Hayes, A. F. (2007). Addressing moderated mediation: theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227.
- Rosenthal, R., Rosnow, R., & Rubin, D. (2000). *Contrasts and effect sizes in behavioral research: A correlational approach*. Cambridge University Press.
- Sedikides, C., & Green, J. (2000). On the self-protective nature of inconsistency-negativity management: using the person memory paradigm to examine self-referent memory. *Journal of Personality and Social Psychology*, 79, 906–922.
- Sedikides, C., & Green, J. (2004). What I don't recall can't hurt me: information negativity versus information inconsistency as determinants of memorial self-defense. *Social Cognition*, 22, 4–29.
- Sobel, M. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13, 290–312.
- Spencer-Rodgers, J., Boucher, H. C., Mori, S., Wang, L., & Peng, K. (2009). The dialectical self-concept: contradiction, change, and holism in East Asian cultures. *Personality and Social Psychology Bulletin*, 35, 29–44.
- Spencer-Rodgers, J., Srivastava, S., Boucher, H. C., English, T., Paletz, S. B., Hou, Y., et al. (2008). The dialectical self scale. University of California, Berkeley. Unpublished manuscript.
- Spencer-Rodgers, J., & Peng, K. (2004). The dialectical self: Contradiction, change, and holism in the East Asian self-concept. In R. M. Sorrentino, D. Cohen, J. M. Olson, & M. P. Zanna (Eds.), *Culture and social behavior: The Ontario Symposium*, 10 (pp. 227–249). Lawrence Erlbaum: Mahwah, NJ.

- Spencer-Rodgers, J., Peng, K., Wang, L., & Hou, Y. (2004). Dialectical self-esteem and east-west differences in psychological well-being. *Personality and Social Psychology Bulletin*, 30, 1416–1432.
- Suh, E. M. (2002). Culture, identity consistency, and subjective well-being. *Journal of Personality and Social Psychology*, 83, 1378–1391.
- Swann, W. B., Pelham, B. W., & Chidester, T. (1988). Change through paradox: using self-verification to alter beliefs. *Journal of Personality and Social Psychology*, 54, 268–273.
- Swann, W. B., Rentfrow, P., & Guinn, J. (2003). Self-verification: The search for coherence. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (pp. 367–383). New York: Guilford.
- Wang, D., & Cui, H. (2003). Processes and preliminary results in the construction of the Chinese Personality Scale (QZPS). *Acta Psychologica Sinica*, 35, 127–136.