Culture and Self-Concept Stability: Consistency Across and Within Contexts Among Asian Americans and European Americans

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Whereas prior cultural research has focused on consistency of self-descriptions across contexts, the current 4 studies examined cultural differences in consistency of multiple self-dimensions and did so both across and within different contexts. Supporting predictions, Study 1a found that Asian Americans were less consistent in their self-descriptions across relationship contexts than were European Americans. Yet Study 1b, a short-term longitudinal study, found that Asian Americans’ self-descriptions nonetheless showed high consistency within these contexts over time. Together, these findings suggest that for Asian Americans self-concept stability derives from defining the self in “if–then” terms, that is, as variable across relationship contexts but stable within them. In Studies 2a and 2b, parallel consistency effects emerged for 2 core motivational facets of the self-concept: self-view importance and self-enhancement. Moreover, dialectical beliefs mediated the cultural difference in consistency across contexts. Overall, the results demonstrate both the robustness and the boundaries of cultural differences in self-concept consistency as well as the importance of examining multiple forms of stability in the self-concept. Implications for authenticity and well-being are discussed.

Keywords: self-concept, culture, consistency, relational self, interactionism

It has become widely accepted that the self-concept is not a fixed entity but rather a dynamic structure that comes about through interaction with the social environment (Higgins, 1987; Kihlstrom & Cantor, 1984; Linville, 1987; Markus & Nurius, 1986). People hold distinct views of themselves not only as individuals but also as partners in relationships with significant others (Chen, Boucher, & Tapias, 2006) and as members of social groups (Tajfel & Turner, 1986). Nonetheless, there are substantial individual differences in how variable people’s self-conceptions are across different contexts (e.g., Block, 1961; Donahue, Robins, Roberts, & John, 1993; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). Whereas some individuals view themselves in a fairly consistent fashion, others are more influenced by the surrounding context.

The present studies aimed to extend research showing less consistency across contexts in the self-descriptions of East Asians than those of Westerners (e.g., Cousins, 1989; Kanagawa, Cross, & Markus, 2001; Suh, 2002) by examining the consistency of multiple aspects of the self-concept both across and within different types of contexts. We predicted that cultural differences in self-concept stability hold mainly for relationship contexts and extend beyond self-descriptions to other facets of the self-concept, namely, the importance attached to self-views and self-enhancement. Most important, we proposed that the low consistency across relationship contexts hypothesized for individuals with an East Asian cultural background need not imply a random or unstable self but rather may reflect meaningful context-specificity that endures over time. Thus, we predicted that such individuals would exhibit low consistency (or high specificity) across relationship contexts paired with high temporal stability within these contexts. Such low consistency across contexts coupled with high temporal stability of context-specific selves reflects a self-concept defined in stable, “if–then” terms.

Cultural Differences in Self-Concept Consistency

Although individuals across cultures undoubtedly display some variation in behavior as a function of the immediate situation, many theories suggest that East Asians are especially likely to elaborate context-specific self-conceptions based on this variation. In particular, the dialectical (Peng & Nisbett, 1999) and collectivist (Markus & Kitayama, 1991; Triandis, 1989) nature of East Asian culture—its practices, institutions, and traditions—are thought to foster the development of a self-concept that is highly responsive to others and thus variable across contexts and seemingly inconsistent. In essence, East Asians tend to be more attuned to, and place more meaning on, fluctuations in their behavior and environment. In contrast, Westerners are believed to view behavioral variability as not reflective of the “true” self and to attribute such variability to external factors rather than elaborating context-specific selves from it.
**Dialecticism**—thought to arise from Eastern philosophical, religious, and epistemological traditions—is a system of thought characterized by acceptance of contradiction, expectation of change and dynamism, and holistic perception (Peng & Nisbett, 1999). Applied to the self-concept, dialecticism implies being attuned to fluctuations in the sense of self and accepting inconsistency as a natural part of life rather than viewing it as a precursor to psychic tension. The dialectical self-concept changes across contexts because behavior is seen as inextricably linked to the context in which it occurs. Consistent with this dialectical perspective, East Asians tend to view personality as open to change, rather than fixed (Chiu, Hong, & Dweck, 1997), and are more likely to consider situational factors when explaining their own and others’ behavior (Choi, Nisbett, & Norenzayan, 1999). By contrast, Western traditions give rise to a linear system of thought that stresses rational, analytical thinking and the synthesis of information to create internal coherence. As a result, Westerners tend to develop a more internally coherent and decontextualized or global sense of self than East Asians do.

A dialectical approach to the self-concept is consistent with the *interdependent self-construal* (Markus & Kitayama, 1991), a form of self-concept that is thought to be fostered in collectivistic cultures, such as those in East Asia. In these cultures, value is placed on adjusting behavior to fit the demands of in-group members and on properly fulfilling designated roles in order to maintain relationship harmony. Therefore, East Asians tend to possess multiple, context-specific selves that respond to changes in the social environment and thus that may be inconsistent across different social contexts. In contrast, individualistic cultures (e.g., that of the United States) place primary importance on forming a unique, coherent identity, which leads to efforts to maintain an *independent self-construal* that reflects a single, stable self across contexts.

Supporting the above theoretical distinctions between cultures, considerable evidence suggests that the self-views of East Asians are more context-dependent than those of Westerners. For instance, East Asians are less likely than European Americans to describe themselves in terms of abstract traits but more likely to refer to social roles and other contextual markers (Bond & Cheung, 1983; Choi & Choi, 2002; Cousins, 1989; Ip & Bond, 1995; Markus, Mullally, & Kitayama, 1997; Rhee, Uleman, Lee, & Roman, 1995). Studies focused more explicitly on cultural differences in self-concept consistency have found that East Asians’ self-descriptions are less consistent across contexts than those of Americans. For example, Suh (2002) found that compared with Americans, Koreans showed less consistency across trait ratings of themselves in general and in particular relationship contexts (e.g., ratings of “how bossy I am in general” vs. ratings of “how bossy I am with my mother”). That is, Koreans’ self-descriptions in relationship contexts did not map as closely onto their global self-descriptions as did those of Americans. In other research, Kanagawa et al. (2001) had Japanese and Americans fill out an open-ended, self-concept measure (i.e., Twenty Statements Test) while actually situated in different contexts (e.g., with a peer, with a higher status partner) and found that the Japanese were less consistent across contexts in terms of the categories of self-descriptions they used (e.g., abilities, roles, attitudes).

East Asians may also be less motivated to resolve inconsistency with regard to the self-concept and more broadly. For instance, East Asians are more likely than Americans to endorse opposite traits as self-descriptive (Choi & Choi, 2002; Spencer-Rodgers, Boucher, Mori, Wang, & Peng, 2007) and to have less coherent global self-views (Campbell et al., 1996). East Asians also tend to report more contradictory emotions than Americans (Bagozzi, Wong, & Yi, 1999), are often less likely to show the usual dissonance reduction effects (Heine & Lehman, 1997), and expect less consistency between others’ attitudes and behavior (Kashima, Siegel, Tanaka, & Kashima, 1992). Overall, whereas Westerners tend to emphasize global conceptions of the self-concept that remain consistent across contexts, East Asians tend to elaborate context-specific selves.

**Context Types: Relationships Versus Situations**

Whether and to what extent a particular context influences the self-concept depends on its psychological significance to the individual. Yet distinctions among different types of contexts are generally lacking in the literature on culture and self-concept consistency. Thus, the first major aim of the present research was to explicitly test whether cultural differences in self-concept consistency hold across different types of contexts, in particular, contexts that reflect a situation (i.e., physical setting) or a relationship.

Some work suggests that East Asians qualify their self-descriptions with both situational (e.g., at school) and relationship (e.g., with friends) markers (Cousins, 1989; Markus et al., 1997), implying that their self-descriptions might fluctuate across both types of contexts. However, given that a key distinction between East Asian and Western cultures is the differential emphasis on roles and relationships (e.g., Markus & Kitayama, 1991), we hypothesized that East–West differences in self-concept consistency would be most apparent when the salient context is composed of close relationship partners. That is, relative to European Americans, Asian Americans are more likely to elaborate relational selves, each one designating the particular self one is in relation to a specific relationship partner (e.g., Andersen & Chen, 2002). In contrast, we did not expect Asian Americans to be less consistent than European Americans across situations in which relationship partners are not the central focus.

**Beyond Consistency Across Contexts: Defining the Self-Concept in Stable, If–Then Terms**

If East Asians’ self-concepts are considerably less consistent across relationship contexts than those of Westerners, does that imply that East Asians lack a meaningful, coherent sense of self to guide behavior? Or instead do they hold distinct context-specific selves that vary across relationships but endure over time? To answer these questions, we drew on recent interactionist or Person × Situation views of personality, which suggest that each individual has a distinct behavioral signature, or if–then profile, wherein the *if* refers to the situation and the *then* refers to the individual’s response in the situation (Mendoza-Denton, Ayduk, Mischel, Shoda, & Testa, 2001; Mendoza-Denton & Mischel, in press; Mischel & Shoda, 1995; Shoda, Mischel, & Wright, 1993). If–then profiles designate variability in the self-concept across different contexts, while at the same time capturing stability in the
self-concept within similar contexts over time. In other words, people’s conceptions of the self can vary from one context to the next, but their self-views can nonetheless be stable within particular contexts from one point in time to another. Low consistency across contexts coupled with high temporal stability within contexts implies a stable self-concept defined in if–then terms.

Cross-cultural research on self-concept consistency has largely ignored this if–then form of consistency, focusing instead on consistency across contexts, which has often led to the conclusion that East Asians lack stability in the self-concept. Addressing this gap, our second major aim was to examine cultural differences in consistency in the self-concept not only across contexts but also within particular contexts over time (i.e., temporal stability of context-specific selves). We assessed consistency across contexts by comparing self-concept ratings in one context with those in a different context at a single point in time and consistency within contexts by measuring the stability of self-concept ratings within a given context over two points in time.

Theory and research have suggested that the need for psychological coherence is universal (Church, 2000; Heine, Proulx, & Vohs, 2006; Swann, 1990), implying that members of any culture are likely to strive for stability in the self-concept in some manner. Accordingly, we hypothesized that self-concept stability can be found among both East Asians and Westerners, only this stability may take different forms. In particular, whereas Westerners tend to define the self in relatively stable, global terms, East Asians define the self in stable, if–then terms, that is, they exhibit low self-concept consistency across relationship contexts paired with high temporal stability of their relational selves. Such if–then stability should promote relationship harmony, which is of topmost importance in collectivistic, East Asian cultures. Specifically, low self-concept consistency across relationships implies tailoring the self-concept to suit different relationship partners, whereas high temporal stability of these specific relational selves, once formed, bestows relationship partners with a sense of security and control and facilitates smooth interactions between them (e.g., Swann, 1990).

Overall, then, we propose that low consistency across contexts need not imply a lack of meaningful, enduring self-views but rather can coexist with stable, context-specific self-conceptions. Put differently, self-concept stability may derive from global, cross-situationally consistent self-views but can also be based on if–then self-conceptions. Whereas Westerners may strive more for the former, global kind of stability (see the top panel of Figure 1), East Asians may be more inclined toward the latter, if–then form of stability (see the bottom panel of Figure 1).

Beyond Self-Descriptions

Many dimensions and features meaningfully characterize the self-concept, among them organizational structure, goals, and affect. However, cross-cultural research on self-concept consistency has largely focused on self-descriptions, that is, how people describe themselves, assessed through ratings of the self-descriptiveness of traits or through open-ended listings of self-descriptors (e.g., Kanagawa et al., 2001; Suh, 2002). One exception is Oishi, Diener, Scollon, and Biswas-Diener’s (2004) examination of consistency of affective experiences across contexts. In their experience sampling study, they found that both positive and negative self-reported emotions varied more across relationship contexts for Japanese than for Americans. Such exceptions suggest the importance of moving beyond the focus on consistency in self-descriptions. After all, different aspects of the self-concept are often tied to one another. For instance, the goals one has for oneself in a given situation may determine how one sees oneself and the emotions one experiences in that context.

Thus, the third major aim of the current research was to extend the examination of cultural differences in self-concept consistency to aspects other than self-descriptiveness. In particular, we examined two motivational aspects of the self-concept: self-view importance and self-enhancement. The importance attached to self-views is an indicator of one’s psychological investment in them. In other words, important self-views are closely tied to one’s goals and motivations (Pelham, 1991; Trope, 1986). Accordingly, self-view importance predicts information processing and enjoyment of relevant activities (Markus, 1977; Pelham, 1991). Moreover, people are especially likely to seek confirmation of their most important self-views (Chen, Chen, & Shaw, 2004; Pelham & Swann, 1994; Swann & Pelham, 2002b), presumably because these are the self-aspects that are most self-defining and from which we garner a sense of authenticity (Swann & Pelham, 2002a).

Self-enhancement, the motivation to see oneself in a positive light, is among the most widely investigated and robustly documented self-evaluative motives. Moreover, it has important implications for relationship satisfaction (Murray, Holmes, & Griffin, 1996) as well as mental and physical well-being (Taylor & Brown, 1988). The universality of a self-enhancement motivation has been a matter of debate in recent years (e.g., Heine & Hamamura, 2007; Heine, Lehman, Markus, & Kitayama, 1999). This debate has focused on East–West differences in absolute levels of the motivation, whereas our concern is with variability or consistency in self-enhancement across and within contexts. In particular, regardless of possible East–West differences in self-enhancement in an absolute sense, specific contexts may activate self-enhancement motives to differing degrees. For example, Japanese describe themselves more positively when they are alone than when they are in the presence of others, suggesting that their self-enhancement tendencies may vary across contexts (Kanagawa et al., 2001).

We hypothesized that cultural differences in self-concept consistency extend to self-view importance and self-enhancement, such that both of these motivational aspects of the self-concept are less consistent across different relational selves for East Asians than for Westerners but equally stable within contexts over time. To test this hypothesis, we asked participants to rate the importance attached to their self-views as well as to rate themselves compared with the average college student (i.e., “better-than-average effect” [BAE]; e.g., Brown, 1986; Lemyre & Smith, 1985), in different relationship contexts, and computed the degree of consistency in participants’ ratings across these contexts and the degree of stability within these contexts over time.

Overview of Studies

Across four studies, we examined the consistency of multiple aspects of the self-concept across specific contexts (Studies 1a &
2a) and the stability of these aspects within contexts over time (Studies 1b & 2b). In each, we recruited Asian Americans and European Americans, thus relying on ethnicity as a proxy for culture, following the lead of various other cultural researchers (e.g., Lockwood, Marshall, & Sadler, 2005; Norasakkunkit & Kalick, 2002; White & Lehman, 2005). In Study 1a, we aimed to explicitly test if cultural differences in self-concept consistency hold for relationship contexts (e.g., with Mom), and not situational ones in which relationship partners are not specified (e.g., at the library). Complementing Study 1a, Study 1b was a short-term longitudinal study that assessed the consistency of participants’ context-specific self-views over two points in time, allowing us to test the hypothesis that within relationship contexts the temporal stability of Asian Americans’ self-descriptions are as high as that found for European Americans’ self-descriptions. In Studies 2a and 2b, we expected to conceptually replicate and extend Studies 1a and 1b by investigating the consistency of self-view importance and self-enhancement both across contexts and within contexts over time.

Study 1a: Consistency of Self-Descriptions Across Situations and Relationships

Study 1a examined cultural differences in the consistency of self-descriptions across contexts, with the goal of extending earlier work by explicitly testing whether the type of context in which self-views are embedded matters. As noted, we predicted that cultural differences in self-concept consistency should be most pronounced across contexts in which relationship partners are the explicit focus because of the particular importance of relationships and interpersonal harmony in East Asian cultures (Markus & Kitayama, 1991). Thus, our main hypothesis was that, compared with European Americans, Asian Americans would show less consistency in their self-descriptions across relationship contexts, whereas the two groups would not differ in consistency across situational contexts (i.e., where relationship partners are not featured). Inclusion of both types of contexts allowed us to demonstrate that Asian Americans are not indiscriminately less consistent than European Americans but rather the lower consistency of their self-views is specific to contexts that hold unique cultural import.

Method

Participants. Participants were 284 undergraduates (67% women, 33% men) enrolled in introductory psychology courses who received partial course credit. The distribution of self-reported ethnicity was 47% European American and 53% East Asian American (i.e., Chinese, Japanese, or Korean American).

Materials and procedure. Participants filled out one of two versions (situational or relationship context) of a questionnaire, which was embedded in a battery of questionnaires administered to all students in introductory psychology courses at the start of the semester. The version participants received was determined by the random distribution of the larger battery. In the situational context version, participants were presented with four everyday situations (i.e., discussion section, gym, party, cafeteria) and were asked to select the two in which they were most able to describe themselves. They then rated how much each of five positive (conscientious, expressive, open-minded, patient) and five negative (bossy, irresponsible, lazy, moody, picky) attributes described them in each context they chose (1 not at all, 7 very much). In the relationship context version, participants were presented with two pairs of relationships (friends–roommates, parents–siblings). For each pair, they were told to choose the relationship in which they could best describe themselves. They then rated how descriptive each of the same 10 attributes was of them in each relationship they chose. Participants filled out a demographic questionnaire at the end of the battery of questionnaires.

Index of consistency across situational or relationship contexts. To create an index of consistency across contexts, we computed a within-subject correlation between each participant’s self-descriptiveness ratings for the two situational (e.g., party and discussion section) or relationship (e.g., friends and parents) contexts he or she rated. Larger positive correlations indicate greater
consistency in participants’ self-descriptions across different situations or relationships.  

Results

We entered gender as a predictor in the analyses in this and all subsequent studies. Because it did not affect any of our primary analyses, we do not discuss it further.

To test Study 1a’s central hypothesis, we conducted an Ethnicity × Context Type analysis of variance (ANOVA) for participants’ consistency scores (i.e., Fisher r-to-Z transformed within-subject correlations). This analysis yielded a marginal context type main effect, F(1, 276) = 3.61, p < .10, which was qualified by the predicted interaction, F(1, 276) = 8.62, p < .01 (see Table 1 for means). Across relationship contexts, Asian Americans (M = .38, SD = .44) had significantly lower consistency scores than European Americans (M = .56, SD = .29), t(155) = 2.44, p < .01. Moreover, the modest size of the correlation seen among Asian Americans indicates that these individuals view the self largely in relationship-specific terms, whereas the moderately large size of the correlation for European Americans suggests a relatively more global self-conception. The same ethnicity difference was not found for situational contexts; Asian Americans exhibited slightly greater consistency across these contexts than did European Americans, but this difference was only marginal, t(121) = 1.77, p < .10. Finally, Asian Americans’ self-views were less consistent across relationship contexts than situational ones, t(149) = 3.41, p < .01, whereas European Americans showed the same amount of consistency across both context types, t(127) = 0.75, ns.

Discussion

In sum, replicating and extending past research (Kanagawa et al., 2001; Suh, 2002), Study 1a’s findings suggest that cultural differences in consistency of self-descriptions across contexts appear to be driven by the relational features of contexts, rather than by a particular setting in and of itself. In addition, the results indicate that Asian Americans possess self-concepts that are tailored to specific relationship contexts, whereas European Americans hold relatively more global, decontextualized self-conceptions.

Study 1b: Stability of Self-Descriptions Within Relationships and Situations Over Time

Complementing Study 1a’s findings, we conducted a short-term longitudinal study to examine the consistency of self-descriptions within contexts over time, in other words, the stability of context-specific or if–then conceptions of the self. We reasoned that although Asian Americans’ self-descriptions flexibly respond to the current relationship context, as shown in Study 1a, once formed their relationship-specific self-views endure and form the basis of meaningful relational selves. Thus, Study 1b’s main hypothesis was that Asian Americans’ relationship-specific self-descriptions would exhibit high temporal stability equivalent to that exhibited by European Americans. Among European Americans, Study 1a documented relatively high consistency in their self-descriptions across both relationship and situational contexts, implying that their self-views may be relatively less tailored to specific contexts. Accordingly, any temporal stability seen in European Americans’ context-specific self-views in the present study would tend to suggest the workings of relatively more stable, global self-conceptions.

Method

Participants. Participants were 98 undergraduates (69% women, 31% men) enrolled in introductory psychology courses who received partial course credit. Self-reported ethnicity was 55% European American and 45% East Asian American.

Materials and procedure. The same materials as in Study 1a were given to participants in two consecutive semesters. The

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Table 1

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<thead>
<tr>
<th>Context type</th>
<th>Asian Americans</th>
<th>European Americans</th>
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<td>.56 (.29)</td>
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<tr>
<td>Relationship</td>
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<td>.53 (.34)</td>
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<table>
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<tr>
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<th>Situational</th>
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<tbody>
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<td>.75 (.28)</td>
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<td>.66 (.25)</td>
<td>.68 (.22)</td>
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Note. The table shows raw mean within-subject correlations either across two contexts (Study 1a) or across time within specific contexts (Study 1b), with standard deviations in parentheses. Significance levels represent the degree to which the Fisher r-to-Z transformed values of the means within a row differ across ethnic groups.

1 p < .10. 2 p < .05

3 Because it may be argued that the situations we chose were all potentially relevant to a similar role (i.e., student), we asked an additional sample of Asian American and European American participants to make attribute ratings of themselves across two of a more diverse set of situations (i.e., restaurant, work, professional sporting event, grocery store). Once again, there was no difference between Asian Americans (n = 27, r = .50) and European Americans (n = 26, r = .53) in the consistency of their self-descriptions across situations (t < 1).
average interval between Time 1 and Time 2 was 25 weeks (SD = 4). As in Study 1a, participants were randomly assigned to either the relationship or situational context condition. Participants who described themselves in the same relationship or situation at both time points were included in this study.

Results

Consistency of self-descriptions across relationships and situations. Study 1b gave us another opportunity to test Study 1a’s hypothesis regarding cultural differences in the consistency of self-descriptions across contexts. Specifically, for each participant we computed an index of consistency across situational or relationship contexts (as in Study 1a) at both Time 1 and Time 2. We then conducted an Ethnicity × Context Type ANOVA for participants’ consistency scores averaged across the two time points. Replicating Study 1a, this analysis yielded a context type main effect, $F(1, 93) = 8.79, p < .01$, which was qualified by the predicted interaction, $F(1, 93) = 8.42, p < .01$. Once again, the self-descriptions of Asian Americans ($M = .28, SD = .30$) were less consistent across relationship contexts than were those of European Americans ($M = .52, SD = .34$), $t(48) = 2.86, p < .01$, whereas the two groups did not differ for situational contexts ($Asian Americans, M = .63, SD = .33$; European Americans, $M = .53, SD = .29$), $t(45) = 1.33, ns$.

Stability of self-descriptions within relationships and situations over time. To create an index of within-context consistency (i.e., temporal stability) for each participant, we computed the within-subject correlation between his or her self-descriptiveness ratings for the same situation or same relationship across Time 1 and Time 2. Larger positive correlations indicate greater temporal stability of self-descriptions within individuals for relationship or situational contexts over time. As predicted, Asian Americans’ relationship-specific self-descriptions were on average highly stable over time, as were European Americans (see Table 1 for means). In addition, the situation-specific self-descriptions of both groups showed high temporal stability. There was no ethnicity difference in the stability of self-descriptions in either type of context ($ts < 1.37$).

Discussion

Study 1b’s findings suggest that the self-descriptions of Asian Americans are as highly consistent over time within specific contexts (both relationship and situational ones) as are European Americans. Together, the results for consistency across contexts (Studies 1a and 1b) and temporal stability (Study 1b) indicate that although Asian Americans’ self-descriptions tend to vary more across their relationships than do those of European Americans, an if–then form of self-concept consistency can nonetheless be found among Asian Americans, namely, in the form of stable self-conceptions within specific relationship contexts over time. By contrast, the high consistency seen in European-Americans’ self-descriptions both across and within contexts may suggest a more global self-concept, one that is relatively stable across contexts and time.

Study 2a: Consistency of Self-View Importance and Self-Enhancement Across Relationships

Study 2a examined whether the cultural difference in consistency of self-descriptions across relationship contexts extends to motivational aspects of the self-concept, in particular, the importance attached to self-views and self-enhancement. Because Study 1a showed that cultural differences emerged specifically in relationship contexts, only these contexts were included in this study. We assessed self-view importance in the same fashion as past researchers (e.g., Dunning, 1995; Pelham, 1991), specifically, by asking participants how personally important a number of traits are to how they see themselves. In terms of self-enhancement, a wide array of assessment techniques have been used, among them false uniqueness (Heine, Kitayama, & Lehman, 2001; Heine & Lehman, 1997; Markus & Kitayama, 1991), relative optimism (Chang, Asakawa, & Sanna, 2001; Heine & Lehman, 1995), attributions and memory for success and failure (Endo & Meijer, 2004), self-esteem measures (Campbell et al., 1996; Endo, Heine, & Lehman, 2000; Spencer-Rodgers, Peng, Wang, & Hou, 2004), and actual–ideal discrepancies (Heine & Lehman, 1999). We used the BAE, or the tendency for people to describe themselves as being better than others, because it is a well-established measure of self-enhancement (Brown, 1986; Dunning, 1999; Lemyre & Smith, 1985) and has often been used in studies of culture and self-enhancement (e.g., Brown & Kobayashi, 2002; Heine & Lehman, 1999; Kobayashi & Brown, 2003; Kurman, 2001).

A second purpose of Study 2a was to investigate a potential mechanism underlying Asian Americans’ tendency to show less consistency across relationship contexts than do European Americans. To do so, we examined an aspect of dialecticism, the belief that one’s behavior tends to vary frequently, as a mediator of this cultural difference in consistency. Prior research has shown that dialecticism is associated with more context-specific and contradictory self-views (Spencer-Rodgers, Boucher, Mori, et al., 2005). Dialectical beliefs about behavior are particularly relevant to consistency of the self-concept across contexts because observations of one’s own behavior are a major source of self-knowledge (Bem, 1972). Thus, if people believe their behavior changes from one context to the next, then their self-views are likely to vary accordingly.

Overall, Study 2a’s main hypothesis was that compared with European Americans, Asian Americans would exhibit less consistency across relationship contexts in both their perceptions of self-view importance and self-enhancement tendencies. In addition, we expected that dialectical beliefs about behavior would mediate these effects.

Method

Participants. Participants were 141 undergraduates (61% women, 39% men) enrolled in various psychology courses who received partial course credit. Self-reported ethnic identity was 52% European American and 48% East Asian American. Forty-five percent of the East Asian Americans were first generation. The study was run in groups of 2–8 participants.

Measures and procedure. On arrival, an experimenter informed participants that they would be filling out several questionnaires about their self-views. The BAE was assessed by having participants rate their standing on each of 15 attributes (anxious, athletic, attractive, competitive, creative, dominant, intelligent, lazy, organized, outgoing, patient, picky, sensitive, successful, talkative) relative to other college students using a 19-point percentile scale ranging from 5% (way
Each participant filled out the above questions for two relational selves: self-with-friend and self-with-mother. In other words, they made self-view importance and self-enhancement ratings for their self-concept in the context of their relationship with a friend and with their mother. For their relational self with a friend, participants were asked to think of a close friend and write down his or her first name. They were then instructed to think about their relationship with this friend and what they are like with him or her before making ratings of how they see themselves with their friend. The relational self with mother ratings were made in a similar manner, except participants were not asked to write down their mother’s name. The order of relationships was counterbalanced. Order was entered as a predictor in all analyses but did not affect our primary analyses and thus are not discussed further.

Next, participants completed the Dialectical Self Scale (DSS; Spencer-Rodgers, Boucher, English, et al., 2005) by rating their agreement with each scale item (1 = not at all, 7 = very much). We were primarily interested in the eight items pertaining to dialectical beliefs about behavior (e.g., “I often change the way I am, depending on who I am with”; “I am the same around my family as I am around my friends”), which tap the tendency to view oneself as acting differently depending on the context. Scores for dialectical beliefs about behavior were computed by reverse-scoring the appropriate items and then averaging across all eight items (α = .66). Higher scores indicate a greater tendency to view one’s behavior as frequently changing. Finally, participants provided demographic information, were probed for suspicion (“What do you think the hypotheses were?”), and were debriefed and thanked.

Indices of consistency across relationships. We computed the within-subject correlation between each participant’s ratings for his or her two relational selves (i.e., self-with-friend and self-with-mother) across the 15 attributes. Separate correlations were computed for self-view importance and for BAE ratings. Larger positive correlations indicate greater consistency across relationships in self-view importance and self-enhancement.

Results

Consistency of self-view importance across relationships. The correlation between participants’ importance ratings for their relational self with friend and relational self with mother was marginally significantly lower for Asian Americans than for European Americans, (t(138) = 1.88, p = .06 (see Table 2 for means), indicating that, as predicted, the importance Asian Americans attach to their relationship-specific self-views varied more across their relationships with their friend and mother than was the case for European Americans. That is, Asian Americans’ judgments of self-view importance were more discriminating, or specific to the relationship in question.

Consistency of the BAE across relationships. As predicted, the correlation between participants’ BAE ratings for their relational self with friend and relational self with mother was significantly lower for Asian Americans than for European Americans, (t(139) = 2.00, p < .05 (see Table 2 for means). Thus, Asian Americans’ tendency to view the self as better than others varied more across their relationship-specific self-views than did that of European Americans. In other words, Asian Americans’ self-enhancement tendencies are more tailored to specific relationship partners.

Do dialectical beliefs mediate ethnicity differences in consistency across relationships? Following the procedures to test for mediation set forth by Baron and Kenny (1986), we conducted regression analyses examining (a) the relationship between ethnicity (the predictor variable) and consistency of self-ratings (the outcome variable), (b) the relationship between ethnicity and dialectical beliefs about behavior (the proposed mediator), and (c) the relationship between dialectical beliefs about behavior and consistency of self-ratings controlling for ethnicity.

First, we tested for mediation of the ethnicity difference in consistency of self-view importance ratings across relationships. Meeting the first criterion for mediation and consistent with the above test, ethnicity (dummy coded as European Americans = 1, Asian Americans = 0) marginally significantly predicted the consistency of importance ratings across friend and mother (β = -.16, p = .06). Meeting the second criterion, ethnicity predicted dialectical beliefs about behavior (β = .29, p < .001), such that Asian Americans scored higher on these beliefs. Finally, when both ethnicity and dialectical beliefs about behavior were simultaneously entered into a regression predicting the consistency of importance across relationships, dialectical beliefs about behavior remained a significant predictor (β = -.33, p < .001), whereas ethnicity did not (β = -.06, ns). Together with the Sobel test (z = 2.65, p = .05), these results indicate that dialectical beliefs about behavior mediated the ethnicity difference in consistency of self-view importance across different relationships.

We also tested whether dialectical beliefs about behavior mediated the ethnicity difference in consistency of the BAE across relation-
ships. Ethnicity significantly predicted the consistency of BAE ratings across relationships ($\beta = -.16$, $p = .05$) and, as noted, also predicted dialectical beliefs about behavior. When both ethnicity and these beliefs were simultaneously entered as predictors of the consistency of BAE ratings across relationships, dialectical beliefs about behavior remained a significant predictor ($\beta = -.26$, $p < .01$), whereas ethnicity did not ($\beta = -.09$, ns). Together with the Sobel test ($z = 2.29, p < .05$), these results indicate that dialectical beliefs about behavior mediated the ethnicity difference in consistency of self-enhancement across relationships.5

Ancillary analyses. A potential alternative explanation of our self-view importance findings is that Asian Americans are less consistent in their ratings across relationships because the attributes are less important to them than they are to European Americans. To examine this, we compared the absolute level of self-view importance ratings across ethnic groups. Specifically, we averaged over participants’ importance ratings for the 15 attributes for each relational self (i.e., self-with-friend and self-with-mother) to form composite measures, and then tested for ethnicity differences. If anything, the attributes were more important on average to Asian Americans ($M = 4.08, SD = .80$) than to European Americans ($M = 3.83, SD = .83$) for friend, $t(139) = 1.84, p < .10$, whereas there was no ethnicity difference for mother (Asian American, $M = 3.97, SD = .73$; European American, $M = 3.94, SD = .63$; $t < 1$).

A possible alternative explanation for our BAE findings is that European Americans were more consistent across relationships because they were enhancing all self-views so highly that there was little room for them to vary (i.e., restriction of range). To address this, we examined the absolute level of participants’ self-enhancement ratings. Specifically, we reverse-scored negative attributes (i.e., those rated 4 or below on average on attribute positivity) so that higher BAE ratings indicated more self-enhancement. Participants’ BAE ratings were then averaged over the 15 attributes for self-with-friend and self-with-mother. For both European Americans (friend, $M = 58.69, SD = 5.99$; mother, $M = 56.58, SD = 6.85$) and Asian Americans (friend, $M = 58.82, SD = 5.75$; mother, $M = 54.02, SD = 5.71$), average BAE ratings were only slightly above the midpoint, making it unlikely that our consistency findings for BAE were due to restriction of range.

Discussion

In sum, Study 2a showed that compared with European Americans, Asian Americans are less consistent across relationships in the importance they attach to self-views and in their self-enhancement tendencies, extending prior research on cultural differences in self-concept consistency to aspects of the self-concept other than self-descriptiveness. Finally, we found that dialectical beliefs about behavior mediated the ethnicity differences in self-concept consistency across relationships.

Study 2b: Stability of Self-View Importance and Self-Enhancement Within Relationships Over Time

As a complement to Study 2a, we once again conducted a short-term longitudinal study to assess the consistency of ratings of self-view importance and self-enhancement within specific relationships over time. We expected to conceptually replicate and extend Study 1b, which found that Asian Americans’ self-descriptions exhibited high temporal stability within relationship contexts as did European Americans’ self-descriptions by showing that the importance Asian Americans attach to their self-views and their self-enhancement tendencies are also highly stable within relationships, despite the relative lack of consistency in these aspects of the self-concept across relationships. In other words, the stable, if–then nature of Asian Americans’ self-concept extends to these two motivational facets of the self. By contrast, in light of Study 2a’s consistency findings for European Americans, any temporal stability seen in their within-context importance and self-enhancement ratings would tend to be more indicative of a relatively global, decontextualized self-concept.

Method

Participants. Participants were 87 undergraduates (82% women, 18% men) enrolled in various introductory psychology courses who received partial course credit. Self-reported ethnic identity was 53% European American and 47% East Asian American. Thirty-four percent of the East Asian Americans were first generation.

Materials and procedure. We once again assessed self-enhancement via the BAE by having participants rate their standing on each of eight attributes (anxious, dominant, lazy, outgoing, anxious, dominant, lazy, outgoing, anxious, dominant, lazy, outgoing). Because endorsement of the other DSS items may also bear some relation to self-concept consistency, we also ran mediation analyses for the cultural differences in dialectical beliefs about behavior, we ran this alternative mediation analysis. As noted, Asian Americans scored significantly higher on dialectical beliefs about behavior and lower on both consistency indices (i.e., importance and self-enhancement). When both ethnicity and consistency of importance were entered as predictors of dialectical beliefs about behavior, both ethnicity and consistency remained significant (ethnicity, $β = .18$, $p < .01$; importance, $β = −.56$, $p < .01$). The same pattern emerged when ethnicity and consistency of self-enhancement were entered as predictors of dialectical beliefs (ethnicity, $β = .19$, $p < .01$; self-enhancement, $β = −.49$, $p < .01$). To test whether partial mediation occurred, we ran a Sobel test for each of these mediation analyses and found that both were only marginal (importance, $z = 1.67, p < .10$; self-enhancement, $z = 1.65, p < .10$). These results suggest a trend towards self-concept consistency partially mediating ethnicity differences in dialectical beliefs about behavior. In contrast, we found strong mediation using our initially proposed model, whereby dialectical beliefs about behavior significantly mediated ethnicity differences in self-concept consistency, as noted.

Because endorsement of the other DSS items may also bear some relation to self-concept consistency, we also ran mediation analyses for the cultural differences in consistency using total DSS scores ($α = .88$). As noted, Asian Americans scored significantly lower on both consistency indices (i.e., importance and self-enhancement). They also had significantly higher total DSS scores ($β = .23, p < .01$). When both ethnicity and DSS were entered as predictors of consistency, DSS remained a significant predictor (importance, $β = −.18$, $p < .05$; self-enhancement, $β = −.21$, $p < .05$), whereas ethnicity did not (importance, $β = −.12$, ns; self-enhancement, $β = −.12$, ns). The Sobel test was marginal for both of these mediation analyses (importance, $z = 1.67, p < .10$; self-enhancement, $z = 1.86, p < .10$). Thus, the effects using total DSS scores as the mediator were consistent with, but a bit weaker, than those using dialectical beliefs about behavior scores.
patient, picky, sensitive, talkative) relative to other college students using a 19-point percentile scale ranging from 5% (way below average) to 95% (way above average). Then to assess self-view importance, we had participants rate the importance of each attribute in defining how they see themselves (1 = not at all, 7 = very much). As in Study 2a, each participant filled out the above questions for two relational selves: self-with-friend and self-with-mother. Participants made the above sets of ratings at two points in time. The average interval between Time 1 and Time 2 was 65 days ($SD = 21$).

**Results**

Consistency of self-view importance and self-enhancement across relationships. Study 2b allowed another test of Study 2a’s prediction regarding cultural differences in consistency of self-view importance and self-enhancement across relationships. Specifically, we computed separate within-subject correlations between each participant’s self-view importance and self-enhancement (BAE) ratings across his or her two relational selves. We then averaged each participant’s consistency scores across the two time points for self-view importance and self-enhancement separately. Consistent with Study 2a’s results, Asian Americans’ self-view importance and self-enhancement ratings were less correlated across friend and mother relationships ($r = .47$ and .32, respectively) than were European Americans’ ratings ($r = .59$ and .45, respectively). The ethnicity difference for consistency of self-view importance across relationships was a trend, $t(85) = 1.39$, $p = .17$, and the difference for self-enhancement was significant, $t(85) = 1.96$, $p = .05$. On the whole, these results replicate Study 2a’s key findings.

Stability of self-view importance and self-enhancement within relationships over time. As in Study 1b, we created indices of within-context consistency (i.e., temporal stability) by computing the within-subject correlation between each participant’s Time 1 and Time 2 ratings of each relational self (i.e., self-with-friend and self-with-mother). Larger positive correlations indicate greater stability of self-view importance and BAE ratings within a given relationship context over time. As hypothesized, Asian Americans had moderately to highly stable self-view importance and BAE ratings for their relational selves, as did European Americans (see Table 2 for means). The ethnicity difference for the stability of BAE ratings was not significant ($t < 1$). Unexpectedly, European Americans’ self-view importance ratings were slightly more stable than those of Asian Americans, $t(64) = 1.96$, $p < .10$. However, no such ethnicity difference was found when using an alternative index of within-context consistency based on absolute discrepancy scores (as described in Footnote 1), suggesting that this marginal finding may not be especially robust. Finally, it may be worth noting that although the within-subject correlation index of stability for Asian Americans’ self-view importance ratings was marginally smaller than the corresponding correlation index for European Americans, the degree of stability in Asian Americans’ importance ratings was nevertheless quite high, comparable to the degree of stability seen in Asian Americans’ and European Americans’ BAE ratings over time.

Ancillary analyses. Finally, we considered the issue that our measure of self-enhancement may exaggerate self-enhancement levels because of a cognitive bias (e.g., Giladi & Klar, 2002; Heine & Hamamura, 2007; Klar & Giladi, 1999). Specifically, people tend to rate any singular target (e.g., self) as better than a generalized target (e.g., average college student). Although this bias may cloud interpretation of mean levels of self-enhancement ratings, our focus is on the consistency of BAE ratings across relationships, rendering this bias less of an issue. One might argue, though, that our results might be driven by cultural differences in the consistency of this cognitive bias component of the BAE. Hence, to ensure that our results can be interpreted as the consistency of self-enhancement, we examined the consistency of the “everyone is better than their group’s average” effect (EBTA; Klar & Giladi, 1997), the tendency to rate a specific, nonself target as better than an average member of a collective (e.g., other college students).

The EBTA was assessed (at Time 2 only) by having participants rate the standing of a specific, fictitious college student (of their same gender) relative to other college students using the same attributes and percentile scale used to assess the BAE. Each participant filled out the EBTA questions for two relationships (i.e., Kim/Calvin with friend and mother). As expected, there was no ethnicity difference in the correlation of the EBTA effect across relationships (Asian Americans, $r = .48$; European Americans, $r = .50$, $SD = .37, t < 1$), indicating that Asian Americans do not tend to see other individuals as less consistent across relationship contexts than do European Americans. In other words, we found no cultural difference in the consistency of the cognitive bias component of the BAE, bolstering our interpretation of the BAE difference between Asian Americans and European Americans as a difference in the consistency of self-enhancement tendencies across relationships.

**Discussion**

In sum, the temporal stability of Asian Americans’ self-enhancement ratings within specific relationships was as high as that of European Americans’ self-enhancement ratings, and although the temporal stability of their self-view importance ratings was somewhat lower than that of European Americans’ importance ratings (although not significantly so), both groups showed relatively high levels of temporal stability on this dimension. Taken together with Study 2a, which showed that Asian Americans relative to European Americans exhibit less consistency across relationships in the importance they attach to relationship-specific self-views and their tendency to enhance these self-views, these results suggest that the tendency for Asian Americans to define themselves in stable, if-then terms holds not only for their self-descriptions but also for motivational aspects of their self-concepts.

**General Discussion**

Theory and research suggest that although all people show some degree of malleability and inconsistency in the self-concept across
contexts (e.g., Markus & Wurf, 1987), East Asians tend to hold especially flexible self-concepts. Our results cohere with prior research on cultural differences in self-concept consistency but go further by explicitly testing which contextual features are most likely to be associated with change in Asian Americans’ self-conceptions. Moreover, we examined consistency of self-descriptions as well as motivational facets of the self-concept and did so both across and within contexts over time. Across four studies, our key finding was that Asian Americans’ self-concept is characterized by high if–then stability. That is, their self-concept is largely tailored to specific relationship contexts, and the resulting relational selves are highly stable over time.

More specifically, Study 1a (and the replication reported in Study 1b) showed that Asian Americans’ self-descriptions were less consistent across contexts than European Americans’, but this effect held for relationship contexts, as expected because of cultural differences in the emphasis placed on relationships but not on situational contexts. Paired with Study 1b’s finding of high temporal stability for Asian Americans’ relationship-specific self-descriptions, these results suggest that Asian Americans possess a stable self-concept defined in if–then terms, whereas their stability over time confers relationship partners with a sense of prediction and control and facilitates harmonious interactions (e.g., Swann, 1990).

Studies 2a and 2b showed that the effects documented in the first two studies extend to two core motivational facets of the self-concept, namely, self-view importance and self-enhancement. Asian Americans showed greater relationship-specificity in their importance and self-enhancement ratings than did European Americans, but once again, these context-specific facets of their self-concept exhibited considerable stability over time, equivalent to that of European Americans.

Most cultural research on self-concept consistency has conceptualized consistency in terms of stability across contexts, ignoring the possibility that the self-concept can exhibit consistency within contexts over time. By examining both forms of consistency, we found high temporal stability for Asian Americans’ relational selves, supporting our argument that the previously found inconsistency of Asians’ self-concept across contexts (e.g., Cousins, 1989; Kanagawa et al., 2001; Suh, 2002) is not due to random or fleeting variation. Rather, as suggested by interactionist views of the self-concept and personality (e.g., Mischel & Shoda, 1995), coherence and continuity in the self-concept can be derived from maintaining conceptions of the self that vary across different contexts but that are nonetheless stable within each.

**Implications for Authenticity and Well-Being**

Subjective feelings of authenticity are vital to psychological well-being (e.g., Gross & John, 2003; Kernis, 2003; Sheldon et al., 1997; Swann & Pelham, 2002a). One prominent conceptualization of authenticity involves behaving in a consistent manner across contexts, rather than changing oneself to fit situational demands (e.g., Campbell, 1990; Markus & Kitayama, 1991). Inconsistency in the self-concept across different roles and relationships has been linked to adverse well-being outcomes (e.g., Campbell et al., 1996; Donahue et al., 1993; Sheldon et al., 1997). However, the present results suggest that behaving differently across contexts need not reflect a lack of authenticity or maladaptive fragmentation of the self-concept but rather may reflect the expression of stable, meaningful, and authentic context-specific self-views among those who define themselves in such terms. Consistent with this, there is evidence that the life satisfaction and self-esteem of East Asians are less likely to suffer from inconsistency in the self-concept than are those of Westerners (Campbell et al., 1996; Kashima et al., 2004; Suh, 2002). In addition, psychological well-being hinges less on self-concept consistency across contexts for people in the United States who chronically define themselves in relationally interdependent terms (Cross, Gore, & Morris, 2003). For East Asians and others who define themselves in relational terms, authenticity may derive from honoring the identities negotiated with specific others rather than maintaining a single, global self across contexts and time (Schlenker, 1984; Swann, Bosson, & Pelham, 2002).

**Caveats and Future Directions**

Several caveats about the present studies should be recognized. First, although the results for consistency of self-view importance across relationship contexts followed the same pattern as the results for self-descriptiveness and self-enhancement, the former results were less strong. One possible explanation for this lies in the notion that the importance people attach to their self-views is closely tied to their goals (Pelham, 1991). If people have the same goals across different relationships, this is less likely to push for some degree of consistency in the importance they attach to different self-view dimensions across these relationships. Relationship maintenance is an overriding goal among members of East Asian cultures (e.g., Markus & Kitayama, 1991). Following the above reasoning, to the extent that this goal was salient across relationships for our Asian American participants, this would have made it more difficult to find support for our prediction that Asian Americans would show lower consistency across relationship contexts than European Americans in their self-view importance ratings. Additional research is of course needed to explore this and other possible explanations for the somewhat weaker results found for self-view importance relative to self-descriptions and self-enhancement.

Second, the central findings emerging from the present research suggest that Asian Americans may be more likely than European Americans to hold stable, if–then conceptions of the self, a perspective that stands in contrast to considerable research suggesting that East Asians lack stability in the self-concept. Theoretically, however, anyone may define the self-concept in interactionist terms. In fact, others have theorized that the self-concept may be encoded in Person × Situation terms and, using predominantly European American samples, have shown that such encoding occurs when people are prompted to do so (Mendoza-Denton et al., 2001). In the present studies, although the findings for European Americans were largely consistent with the notion of global stability in the self-concept, it is important to recognize that European Americans nonetheless showed some degree of flexibility in the
self-concept (i.e., their consistency indices reveal variance due to flexibility). Thus, cultural differences in values and lay beliefs about the self and behavior may be associated with variations in the degree to which the self-concept is defined in stable, if–then terms, as our key findings suggest, but people of any culture may form and maintain at least some if–then self-conceptions.

On a more methodological level, it would be worthwhile to replicate the present findings using an East Asian sample rather than relying on ethnicity as a proxy for culture. It would also be useful to test our hypotheses using additional contexts, as there may be idiosyncratic differences in the relationships and situations for which people elaborate context-specific self-views. Along this vein, we would not expect East Asians to hold distinct relational selves for every person they encounter but rather only for significant, in-group members (Markus & Kitayama, 1991). Thus, there might not be cultural differences in self-concept consistency across less important relationship partners (e.g., acquaintances). Finally, it may be important to focus not only on situational and relationship contexts but also on the more psychological features of contexts (e.g., when threat is perceived, when happy), which reflect individuals’ idiosyncratic construals of objectively defined contexts (Mischel & Shoda, 1995).

In terms of implications for personality, it would be interesting to determine whether the patterns of consistency in the self-concept that we found correspond to differences in the consistency of behavior. Although self-views are in part based on actual behavior (Bern, 1972), the two are not perfectly correlated. Changes in behavior across contexts are not necessarily internalized and elaborated into stable context-specific self-views to the same degree across members of different cultures. For example, to the extent that individuals in Western cultures are encouraged to create and maintain a coherent, global summary assessment of the self-concept, they may be less likely to formulate context-specific selves from their behavioral variability relative to members of cultures in which global self-views are less emphasized. Conversely, consistency of the self-concept does not necessarily imply consistency in behavior. For instance, although European Americans may be less likely than Asian Americans to define themselves in if–then terms, it is possible that both groups’ actual personality or behavior is distinctly and stably tailored to the social context. Thus, it would be useful to conduct a cross-cultural experience-sampling study of individual behavior in specific contexts or perhaps examine videotaped interactions of participants with different significant others to assess consistency of behavior across and within contexts.

Conclusion

East Asians’ relative lack of consistency in the self-concept at a global level belies their stability at a lower level of abstraction. That is, although the self-concept of East Asians tends to vary across relational contexts, consistency in the self-concept can nonetheless be found within particular relationships over time. Such if–then consistency (i.e., maintaining distinct relational selves) makes it possible to fulfill both the cultural need for changing oneself to fit the demands of specific significant others and more universal coherence needs. By examining multiple forms of self-concept consistency among members of an East Asian cultural background, we were able to discover not only the broad scope of their flexibility across relationships but also the considerable stability of their relational selves.

References

Dunning, D. (1995). Trait importance and modifiability as factors influ-


