
Dialectical Self-Esteem and East-West Differences in Psychological Well-Being

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A well-documented finding in the literature is that members of many East Asian cultures report lower self-esteem and psychological well-being than do members of Western cultures. The authors present the results of four studies that examined cultural differences in reasoning about psychological contradiction and the effects of naive dialecticism on self-evaluations and psychological adjustment. Mainland Chinese and Asian Americans exhibited greater "ambivalence" or evaluative contradiction in their self-attitudes than did Western synthesis-oriented cultures on a traditional self-report measure of self-esteem (Study 1) and in their spontaneous self-descriptions (Study 2). Naive dialecticism, as assessed with the Dialectical Self Scale, mediated the observed cultural differences in self-esteem and well-being (Study 3). In Study 4, the authors primed naive dialecticism and found that increased dialecticism was related to decreased psychological adjustment. Implications for the conceptualization and measurement of self-esteem and psychological well-being across cultures are discussed.

Keywords: *self-esteem; well-being; self-concept; cross-cultural differences; attitudinal ambivalence; East Asians*

A common and well-documented finding in the literature is that many East Asian cultures and East Asian minority groups report lower levels of self-esteem and well-being than do Western cultures. To illustrate, Japanese, Chinese, and Koreans report lower life satisfaction, more negative affect (e.g., guilt and shame), and greater anxiety, depression, and pessimism than do other cultural groups (Diener & Diener, 1995; Heine & Lehman, 1997a; Kitayama, Markus, & Kurokawa, 2000; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Lee & Seligman, 1997). Judgments of happiness and subjective

well-being are also lower among individuals in many East Asian countries than in Western nations (Diener, Suh, Smith, & Shao, 1995; Kitayama et al., 2000). Likewise, within various multicultural societies, such as the United States, East Asian minority groups report lower self-esteem, poorer life satisfaction, and greater anxiety and depression than do Caucasians and other racial/ethnic groups (Crocker, Major, & Steele, 1998).

Scholars have proposed a number of cultural theories that may elucidate East-West differences in well-being. Individualism-collectivism (Oyserman, Coon, & Kimmelmeier, 2002; Triandis, 1995), independent-interdependent self-construals (Heine & Lehman, 1997a; Markus & Kitayama, 1991), and cultural norms governing the experience and expression of emotion (Diener et al., 1995) have received much attention in the literature. The cultural dimension of naive dialecticism may offer further insight into culture and well-being. Our theoretical perspective draws from three broad areas of research on naive dialecticism (Peng & Nisbett,

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1999), cultural differences in the structure of the self-concept (e.g., Campbell et al., 1996), and attitudinal ambivalence (e.g., Thompson, Zanna, & Griffin, 1995). We submit that cultural differences in reasoning about psychological contradiction account, in part, for the East-West variance in well-being. Relative to Western cultures, East Asians are inclined to acknowledge and accept psychological contradiction. As a result, they may exhibit greater evaluative ambivalence in their self-appraisals and judgments of happiness.

Dialectical Versus Synthetic Thinking

Culturally shared folk epistemologies influence people's reasoning about contradiction as well as their tolerance for ambiguity (Peng & Nisbett, 1999). Western psychology has largely assumed that individuals are uncomfortable with incongruity and that they possess a basic need to synthesize contradictory information about an attitude object (Festinger, 1957; Lewin, 1951; Thompson et al., 1995). Although attitudes are recognized to be complex and multidimensional, they have traditionally been conceptualized as dichotomous or bipolar in nature. That is, one's attitude toward an object or event is either positive or negative, but not both. Operationally, attitudes have been assessed with bipolar scales (e.g., dislike-like), which are designed to elicit an overall summary judgment. According to Thompson et al. (1995), there has been less acknowledgement and study of attitudinal ambivalence in psychology. Most conventional theorizing assumes that attitudinal inconsistency leads to psychic tension or conflict and the need for synthesis (e.g., cognitive dissonance theory, Festinger, 1957; field theory, Lewin, 1951). However, a growing corpus of cross-cultural research has cast doubt on whether these theoretical assertions are tenable across cultures (Choi & Choi, 2002; Heine & Lehman, 1997b; Peng & Nisbett, 1999).

First, some Western research indicates that people possess inconsistent attitudes toward certain attitude objects, such as racial/ethnic outgroups and significant others (Thompson et al., 1995). Split semantic differential scales, which allow for the possibility of two evaluative dimensions, also have shown that individuals may associate positive and negative emotions, such as love and hate, relatively independently with certain objects (Thompson et al., 1995). Nevertheless, to evaluate the *self* as both good and bad, simultaneously, would appear improbable, illogical, or even irrational in most Western nations. Self-evaluative ambivalence may seem especially improbable in societies where positive self-regard is culturally mandated, highly valued, and strongly inculcated in the home and educational system (Heine, Lehman, Markus, & Kitayama, 1999). Overly positive self-appraisals, exaggerated perceptions of control, and unrealistic opti-

mism have been referred to as characteristic of "normal human thought" (Taylor & Brown, 1988, p. 193). We contend that East Asians more readily tolerate psychological contradiction, including positive and negative views of the self. Rather than implausible or maladjusted, we propose that dialectical cultures exhibit greater "ambivalence" or evaluative contradiction in their self-evaluations.

Naive Dialecticism

East Asian epistemologies tend to tolerate, rather than eschew, psychological contradiction (Peng, Ames, & Knowles, 2001). For dialectically oriented cultures, and dialectically oriented individuals within various cultures, the nature of the world is such that masculinity and femininity, strength and weakness, good and bad, and so on exist in the same object or event simultaneously. Recognizing and accepting the duality in all things (yin/yang), including the self, is regarded as normative and adaptive in dialectical cultures. Dialectical thinking is rooted in East Asian philosophical and religious traditions, including Confucianism and Buddhism (Peng & Nisbett, 1999). It is based on three primary tenets: the principle of contradiction (two opposing propositions may both be true), the principle of change (the universe is in flux and is constantly changing), and the principle of holism (all things in the universe are interrelated). Contemporary dialectical thought is embedded within the lay cultural beliefs and folk epistemologies of numerous East Asian cultures, including Chinese, Japanese, and Koreans, among others (Peng & Nisbett, 1999).

In contrast, Western cultures tend to be more linear or synthetic in their cognitive orientation: They consider both sides of an opposing argument and then they search for synthesis and the resolution of incongruity (Lewin, 1951; Peng & Nisbett, 1999). As Lewin (1935) asserted, Western folk epistemologies are rooted in Aristotelian traditions, which emphasize three basic principles (Peng & Nisbett, 1999): the law of identity (if A is true, then A is always true), the law of noncontradiction (A cannot equal not A), and the law of the excluded middle (all propositions must be either true or false). As a result, Westerners are generally less comfortable with contradiction and attitudinal ambivalence is associated with psychic tension and conflict (Festinger, 1957; Lewin, 1951). Several decades of research have shown that Westerners experience cognitive dissonance when their values, preferences, and actions are incongruent (Thompson et al., 1995).

Dialecticism and Well-Being

Dialectical cognitive tendencies influence the manner in which East Asians evaluate themselves, their lives, and their personal well-being. In the domain of self-

perception, East Asians are inclined to acknowledge and accept contradictory (negative) appraisals of the self. For example, Japanese do not discount self-criticism, they accept their failures as readily as their successes, and they exhibit less cognitive dissonance in the face of negative personality feedback (Heine et al., 1999; Heine & Lehman, 1997b; Kitayama et al., 1997). In addition to interdependent self-construals, these findings may reflect a dialectical cognitive tendency to accept both positive and negative aspects of the self (for a similar argument, see Heine et al., 1999).

In the affective domain, dialectical cultures may emphasize and elaborate more negative emotions than do Western cultures (Schimmack, Oishi, & Diener, 2002). Whereas North Americans experience and express a far greater proportion of positive than negative emotions, East Asians report experiencing a greater balance of favorable and unfavorable emotions, in some cases in equal proportions (Bagozzi, Wong, & Yi, 1999; Diener et al., 1995; Suh, Diener, Oishi, & Triandis, 1998). Positive and negative affect are central components of subjective well-being (Diener et al., 1995). Because dialectical thinkers recognize that positive emotional experiences are relatively brief and intermittent (the dialectical principle of change), and because they experience greater affect balance (the dialectical principle of contradiction), they may report lower levels of subjective well-being than do synthesis-oriented cultures.

Dialectical individuals also may expect and accept greater negativity in their lives in general. East Asian philosophical and spiritual traditions emphasize the transience of all things, including favorable experiences, good fortune, and positive feelings (Bagozzi et al., 1999; Diener et al., 1995; Kitayama & Markus, 1999). To illustrate, Japanese do not exhibit unrealistic optimism or exaggerated perceptions of control when evaluating themselves, their lives, and their futures (Heine et al., 1999; Heine & Lehman, 1997a). Likewise, Chinese score lower on measures of optimism than do Americans, in part, because they perceive both positive and negative events as pervasive and enduring (Lee & Seligman, 1997). Because dialectical cultures accept the coexistence of good and bad in their lives (the dialectical principle of contradiction), and because they embrace a view of the world as constantly changing (the dialectical principle of change), their judgments of global life satisfaction may be lower than those of synthesis-oriented cultures.

The findings outlined above may be linked to a fundamental dialectical epistemology among Chinese and other East Asian cultures. Two central features of dialectical ways of knowing are moderation and balance: good is counterbalanced by evil, happiness is offset by sadness, and self-criticism is tempered by sympathy for the self

(Kitayama & Markus, 1999; Peng & Nisbett, 1999). Dialecticism also encourages holistic thinking and discourages the adoption of extreme positions. As a result, ambivalence is deeply rooted in the Chinese self-concept. In common parlance, the word *ambivalence* is often understood to mean ambiguity, indecision, or uncertainty regarding a course of action and the term carries a negative connotation (Simpson & Weiner, 1989). In the present research, we use the term to reflect its etymological meaning. Ambivalence is derived from the Latin terms *ambo*, meaning "two or both," and *valeo*, meaning "to be of value or worth" (Simpson & Weiner, 1989). Hence, ambivalence refers to both valences (positive/negative), the coexistence of evaluative opposites, and the experience of contradictory attitudes or emotions (such as attraction and repulsion, love and hatred), simultaneously, toward an attitude object (Simpson & Weiner, 1989). Although often assumed in Western research, psychic tension and discomfort are not necessary corollaries of an ambivalent state of being (Thompson et al., 1995).

We argue that dialectical cultures more comfortably tolerate the coexistence of opposing drives, emotions, and attitudes within themselves. Contradictory aspects of the self, such as goodness and badness, are viewed as mutually dependent and as existing in active balance within the individual. As a result, dialectical proclivities may lead to more ambivalent or both-valenced self-esteem and well-being ratings among East Asians. To test this central hypothesis, we conducted four studies that investigated the relationship between dialecticism, self-esteem, and well-being in representative Eastern dialectical and Western synthesis-oriented cultures.

STUDY 1

In Study 1, we examined self-evaluative ambivalence using a traditional self-report measure of self-esteem in five groups, which differ on naive dialecticism. Chinese represent a prototypical dialectical culture and Asian Americans tend to be moderately dialectical relative to Chinese. European Americans constitute a prototypical nondialectical, synthesis-oriented culture (Peng & Nisbett, 1999). Because naive dialecticism derives from East Asian cultural traditions (Peng et al., 2001), Latinos and African Americans are also thought to represent cultural groups that are low on dialecticism. The aforementioned groups also differ with respect to their average self-reported levels of self-esteem. Judgments of self-worth are generally lower among Chinese than Americans (e.g., Oishi, Diener, Lucas, & Suh, 1999), Asian Americans tend to report lower self-esteem than do European Americans, and Latinos and African Americans generally possess levels of self-esteem comparable to those of European Americans (Crocker et al., 1998).

Because the groups differ substantially on the cultural dimension of interest, as well as on the criterion of self-esteem, they represent useful groups for testing our hypotheses regarding cultural differences in self-evaluations.

If Chinese more comfortably tolerate psychological contradiction, including evaluative contradiction regarding the self, they should exhibit greater ambivalence in their self-orientation. Attitudinal ambivalence is assessed using separate unidimensional scales, which allow for the possibility of two independent evaluative dimensions, rather than with traditional bipolar scales (e.g., dislike-like). Hence, in the present research, self-esteem was conceptualized as a two-dimensional evaluation of the self as an attitude object and positive and negative self-ratings were examined separately. First, we compared the average levels of positive versus negative self-esteem among the five groups. We predicted that the mean positive and negative self-ratings among dialectical cultures would be more ambivalent or both-valenced (equally positive and negative) than those of synthesis-oriented cultures.

Second, ambivalence was examined as a within-participants variable, or as a property of the individual. Operationally, ambivalence is said to exist when individuals endorse response alternatives that have contradictory implications and these alternatives are of equal value, significance, or strength. Ambivalence has been indexed according to a wide variety of procedures (see Thompson et al., 1995). To provide convergent evidence for our hypotheses, we employed multiple indices. We predicted that dialectical cultures (Chinese, and to a somewhat lesser extent, Asian Americans) would exhibit more ambivalent self-evaluations than would synthesis-oriented cultures (European Americans, Latinos, and African Americans).

Method

PARTICIPANTS AND PROCEDURES

The Chinese participants ($N = 153$) were students at Peking University and Beijing Normal University who were paid 10 yuan (U.S.\$1) for their participation. They ranged in age from 18 to 31 ($M = 21.2$). Fifty-four percent of the sample was female. The American participants (195 Asian Americans, 166 European Americans, 142 Latinos, and 47 African Americans) were students at University of California (UC), Berkeley, and UC Santa Barbara who volunteered or who received course credit for their participation. They ranged in age from 18 to 48 ($M = 20.6$). Sixty-three percent of the sample was female.

MEASURES

Positive and negative evaluations of the self were assessed using six items adapted from the Rosenberg

(1965) Self-Esteem Scale.¹ The items were selected and/or adapted to reflect psychological contradiction and they were rated on a unipolar scale ranging from 1 (*not at all*) to 7 (*very much*). Positive and negative self-esteem scores were computed as the mean of the positive and negative items, respectively. A global self-esteem score was computed as the mean of the positive and negative (reversed) items. Cronbach's alphas for global self-esteem were .79 for Chinese, .85 for Asian Americans, .83 for European Americans, .85 for Latinos, and .73 for African Americans.

As outlined above, attitudinal ambivalence is assessed using separate unidimensional scales. One of the dimensions is categorized as the dominant response (e.g., "I like x," on a 1-9 scale) and the other as the conflicting response (e.g., "I dislike x," on a 1-9 scale). Because the dominant response can be favorable (e.g., "I like x") or it can be negative (e.g., "I dislike x"), the dominant response (L) is defined as the larger of the two evaluative dimensions and the conflicting response (S) is defined as the smaller of the two dimensions.

Self-evaluative ambivalence was computed according to three procedures (see Priester & Petty, 1996; Thompson et al., 1995). The various ambivalence indices differ primarily in how they weight the dominant and conflicting responses. Although the indices differ somewhat, they are all designed to index the extent to which individuals hold equally positive and negative attitudes (Priester & Petty, 1996). For example, individuals who rate themselves as 9 on "good" and 9 on "bad" (on a 1-9 scale), *simultaneously*, hold the most ambivalent self-attitudes, and individuals who rate themselves as 9 on "good" and 1 on "bad" (or 1 on "good" and 9 on "bad") hold the least ambivalent self-attitudes. Likewise, individuals who rate themselves as 9 on "good" and 9 on "bad" possess more ambivalent self-attitudes than do those who rate themselves as 4 and 4. Thus, ambivalence is both a function of the similarity of the responses and the intensity of the responses.

First, ambivalence was computed according to the Conflicting Reactions Model (CRM; Kaplan, 1972). As a linear function of the conflicting response, the CRM essentially indexes the intensity of the conflicting response ($CRM = 2 \times S$) or the extent to which individuals endorse the contradictory viewpoint. The CRM was selected because it represents one of the most widely used models of ambivalence (Priester & Petty, 1996). A shortcoming of the CRM, however, is that it does not take into account the value of the dominant response. The Similarity-Intensity Model (SIM; Thompson et al., 1995) and the Gradual Threshold Model (GTM; Priester & Petty, 1996) take into account both the similarity and intensity of the conflicting responses, and as such, they represent more sensitive indices of ambivalence over a

TABLE 1: Means, Standard Deviations, and Self-Evaluative Ambivalence Scores by Culture

	Chinese		Asian American		European American		Latino		African American		F
	M	(SD)	M	(SD)	M	(SD)	M	(SD)	M	(SD)	
Positive SE	5.29 _a	(1.12)	5.34 _a	(1.09)	5.75 _b	(0.89)	6.11 _{b,c}	(0.92)	6.14 _c	(0.88)	19.95***
Negative SE	3.86 _a	(1.04)	3.63 _a	(1.29)	3.03 _b	(1.20)	2.76 _b	(1.39)	2.75 _b	(1.18)	22.35***
Global SE	4.72 _a	(0.96)	4.86 _a	(1.07)	5.36 _b	(0.93)	5.67 _b	(1.04)	5.70 _b	(0.86)	26.72***
SIM method	5.15 _a	(2.90)	4.35 _a	(3.30)	2.94 _b	(3.58)	1.80 _b	(4.16)	2.07 _b	(3.91)	22.43***
CRM method	7.15 _a	(1.72)	6.66 _a	(1.97)	5.86 _b	(2.14)	5.33 _b	(2.49)	5.48 _b	(2.35)	18.46***
GTM method	7.63 _a	(1.73)	7.11 _{a,b}	(2.13)	6.17 _{b,c}	(2.66)	5.13 _d	(3.51)	5.49 _{c,d}	(3.21)	22.20***

NOTE: Means that do not share a subscript differ at $p < .05$. $df = 697$. SE = self-esteem, SIM = Similarity-Intensity Model, CRM = Conflicting Reactions Model, GTM = Gradual Threshold Model.

*** $p < .001$.

broad range of responses. The GTM has the added advantage of having been validated experimentally (Priester & Petty, 1996). The SIM formula was $3S - L$, where S is the smaller value and L is the larger value. For example, if an individual's positive self-esteem score was 7 and his or her negative self-esteem score was 2 (on a 1 to 7 scale), then the dominant response $L = 7$, the conflicting response $S = 2$, and $SIM = -1$ (values ranging from -4 to 14). Likewise, if an individual's positive self-esteem score was 5 and his or her negative self-esteem score was 6, then $L = 6$, $S = 5$, and $SIM = 9$. The GTM formula was $5S^5 - L^{1/S}$ (with a constant of 1 added to each S and L score to avoid division by 0). For all three indices, higher scores correspond to greater ambivalence.

Results

The groups did not differ with respect to gender. They differed with respect to age, $F(4, 696) = 6.07$, $p < .001$, and age was weakly correlated with the self-esteem variables ($r_s < .10$, $p_s < .05$). All analyses were conducted using gender as a factor. There were no main effects or interactions involving gender. Hence, gender is not discussed further.

Positive, negative, and global self-esteem and self-evaluative ambivalence (SIM, CRM, GTM scores) served as the dependent variables in the following analyses. A multivariate analysis of variance (MANOVA) on the age-adjusted dependent variables (standardized residuals) revealed significant effects of culture on all of the variables ($p_s < .001$). The analyses were repeated on the age-unadjusted variables and the pattern of cultural differences was the same. Hence, for the sake of simplicity, the age-unadjusted results are reported in Table 1.

Consistent with prior research and our hypotheses, dialectical cultures reported lower global self-esteem than did synthesis-oriented cultures. At the group level, the mean positive and negative self-esteem scores among dialectical cultures tended to be both-valenced (equally positive and negative) relative to those of synthesis-oriented cultures (see Table 1). At the individual level,

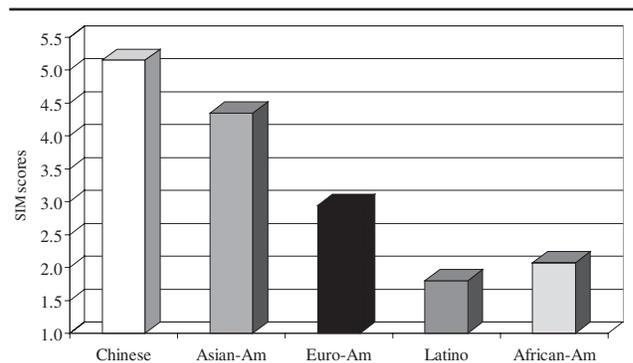


Figure 1 Self-evaluative ambivalence scores by culture.

NOTE: Bars represent individual differences in ambivalence computed according to the Similarity-Intensity Model (SIM) method.

dialectical cultures exhibited significantly more ambivalent self-evaluations than did synthesis-oriented cultures across all three indices (see Figure 1).

Discussion

We hypothesized that cultural differences in reasoning about psychological contradiction would influence self-appraisal processes. When ambivalence was examined at both the group and individual levels, dialectical cultures were found to exhibit more evaluatively contradictory self-views than did synthesis-oriented cultures. Alternatively, positive and negative judgments of self-worth were more polarized among synthesis-oriented cultures. We found that Chinese and Asian Americans exhibited greater self-evaluative ambivalence across all three indicators than did synthesis-oriented cultures. They were more likely to endorse positive and negative statements about the self, simultaneously, than were European Americans, Latinos, and African Americans.

Dialecticism provides an additional theoretical account for why East Asians and East Asian minorities report lower levels of global self-esteem than do Western cultures and European racial/ethnic groups. Taylor and

Brown (1988) asserted that “far from being balanced between the positive and the negative, the perception of self that most individuals ascribe to is heavily weighted toward the positive end of the scale” (p. 195). When positive self-esteem and negative self-esteem were treated as conceptually distinct constructs, a more complete pattern of results emerged. The present findings suggest that dialectical cultures embrace both favorable and unfavorable aspects of self. The dialectical cognitive tendency to accept contradiction (i.e., to endorse both positive and negative statements about the self) has important implications for research that examines cultural differences in self-esteem. Because self-esteem is conceptualized as a global evaluation of the self as an attitude object and self-esteem scores are computed as the average of an individual’s responses to positive and negative (reversed) items on an instrument, East Asians and East Asian minorities will typically exhibit lower global self-esteem than do other groups. Whether this reflects true underlying differences in psychological adjustment is an issue that we will return to later.

Cultural differences in response styles provide an alternative explanation for the findings. The findings could be due to moderacy bias or a tendency among East Asians to rate both positive and negative items toward the middle of the scale (Chen, Lee, & Stevenson, 1995), or they could be due to acquiescence, in which dialectical cultures tend to agree with negatively keyed items. Because the findings could have resulted from idiosyncrasies associated with questionnaire measures, we conducted a second study, which employed an open-ended assessment of self-evaluative ambivalence.

STUDY 2

In Study 2, we examined the valence of participants’ open-ended self-descriptions on the Twenty Statements Test (TST; Kuhn & McPartland, 1954). As in Study 1, we selected groups that provide a contrast between cultures that are known to differ on dialecticism. By asking individuals to report spontaneously their thoughts about themselves, we obtained a relatively unobtrusive assessment of the relative frequency with which dialectical and synthesis-oriented cultures use positive and negative statements when describing the self. Hence, the TST provides a less culturally biased and more naturalistic assessment of self-evaluative ambivalence than do traditional self-report measures.

We predicted that dialectical cultures (Chinese, and to a somewhat lesser extent, Asian Americans) would report a smaller proportion of positive self-descriptions, a greater proportion of negative self-descriptions and a smaller ratio of positive to negative self-descriptions on the TST than would a synthesis-oriented culture. As in Study 1, self-evaluative ambivalence also was examined

as an individual difference variable and ambivalence scores were computed. We hypothesized that dialectical cultures would exhibit greater self-evaluative ambivalence in their open-ended self-descriptions than would European Americans.

Method

PARTICIPANTS AND PROCEDURES

The Chinese participants ($N = 95$) were students at Peking University who participated in the study at the request of their instructor. The American participants were students at UC Berkeley and UC Santa Barbara who volunteered to participate or who received course credit. Individuals who identified as Asian American ($N = 100$) or Caucasian ($N = 110$) were selected as the U.S. sample. They ranged in age from 18 to 49 ($M = 20.8$). Sixty-four percent of the sample was female.

MEASURES

All of the participants completed the TST (Kuhn & McPartland, 1954). Responses on the TST were coded for valence ($-1, 0, 1$) by two bilingual research assistants (Triandis, 1995). The coders worked independently and they were blind to the hypotheses of the study. Altogether, the coders agreed on 93% of the responses and disagreements in coding were resolved through discussion.

The proportions of positive, negative, and neutral self-statements were computed on the basis of the participants’ total number of responses. In addition, the ratio of positive to negative responses was computed for each group. Self-evaluative ambivalence was computed according to the SIM, CRM, and GTM methods, using the percentage of positive and negative self-descriptors as the L and S values (with a constant of 1 added to each L and S score to avoid division by 0). Because we cannot assume that self-generated positive versus negative self-statements on the TST are of equal value, significance, and strength, these indices serve only as approximate indicators of ambivalence. Nevertheless, the indices do provide a relatively unobtrusive assessment of self-evaluative ambivalence.

Results

Between-culture analyses. A MANOVA revealed significant effects of culture on most of the variables. As predicted, Chinese reported a smaller proportion of positive self-statements and a greater proportion of negative self-statements than did European Americans (see Figure 2). At the individual level, across all three indices, Chinese exhibited (nonsignificantly) greater ambivalence in their open-ended self-descriptions than did European Americans (see Table 2). Asian Americans

TABLE 2: Means, Standard Deviations, and Self-Evaluative Ambivalence Scores on the TST by Culture

	Chinese		Asian American		European American		df	F
	M	(SD)	M	(SD)	M	(SD)		
Positive ratio	0.29 _a	(0.20)	0.45 _b	(0.21)	0.50 _b	(0.20)	302	27.89***
Negative ratio	0.30 _a	(0.19)	0.25 _{a,b}	(0.16)	0.21 _b	(0.17)	302	6.73***
Neutral ratio	0.41 _a	(0.18)	0.30 _b	(0.16)	0.29 _b	(0.19)	302	12.44***
SIM method	8.73 _a	(54.53)	7.27 _a	(57.87)	2.00 _a	(62.93)	302	<1
CRM method	55.37 _a	(27.26)	54.64 _a	(28.93)	51.99 _a	(31.47)	302	<1
GTM method	16.57 _a	(32.39)	13.45 _{a,b†}	(37.14)	7.82 _{b†}	(43.47)	302	1.39
Pos/neg ratio	1.71 _a	(2.02)	2.99 _b	(3.71)	3.73 _b	(4.44)	276	7.77***

NOTE: Subscripts a and b differ at $p < .05$; subscripts a and b† differ at $p < .15$. TST = Twenty Statements Test, SIM = Similarity-Intensity Model, CRM = Conflicting Reactions Model, GTM = Gradual Threshold Model.

* $p < .05$. *** $p < .001$.

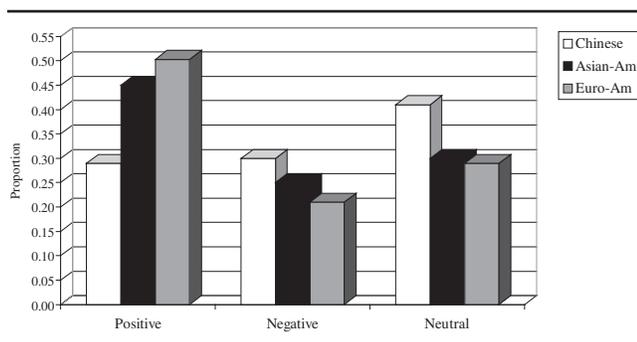


Figure 2 Mean proportion of positive, negative, and neutral self-statements on the Twenty Statements Test (TST) by culture.

possessed moderate scores relative to Chinese and European Americans.

Within-culture analyses. At the within-culture level of analysis, each of the groups reported a greater ratio of positive to negative self-statements. One-sample t tests indicated that the positive/negative ratio was greater than 1 for Chinese, $t(91) = 3.36$, $p < .001$, Asian Americans, $t(91) = 5.15$, $p < .001$, and European Americans, $t(94) = 6.00$, $p < .001$.² These analyses suggest that dialectical cultures are not more negative than positive in their self-evaluations; rather, they tend to be more ambivalent or both-valenced (equally positive and negative) relative to European Americans (see Figure 2).

Discussion

The results from the unstructured TST were generally consistent with the questionnaire data in Study 1. At both the group and individual levels, Chinese demonstrated more ambivalent or evaluatively contradictory self-views than did European Americans. Dialectical cognitive tendencies also may lead to more balanced or middle-of-the-road responses (Peng & Nisbett, 1999) and Chinese reported more neutral free-responses on the TST than did European Americans. Notably, these

cultural differences were not simply attributable to methodological factors (e.g., moderacy bias, acquiescence, or culturally biased questionnaire items) because Chinese exhibited greater ambivalence in the descriptors that they generated themselves. They tended to be more contradictory in their self-evaluations than were European Americans, as was reflected in the proportion data, ratio data, and all three ambivalence indices. Asian Americans tended to possess moderate scores on each of the variables.

Our findings also are consistent with prior research indicating that Hong Kong Chinese and Japanese list a more balanced (positive/negative) ratio of self-statements on the TST than do Americans (e.g., Bond & Cheung, 1983; Kanagawa, Cross, & Markus, 2001). Bond and Cheung found that the ratio of positive to negative self-descriptors was smaller among Japanese and Hong Kong Chinese than Americans. Taken together, these findings are consistent with our hypotheses regarding cultural differences in reasoning about psychological contradiction. East Asians (Mainland Chinese, Hong Kong Chinese, and Japanese) tend to evaluate themselves in a more contradictory manner than do Americans. When we examined groups that are known to differ on the cultural dimension of interest, we found that the most dialectical culture (Chinese) tended to exhibit greater self-evaluative ambivalence than did Asian Americans, who in turn, tended to exhibit greater self-evaluative ambivalence than did the least dialectical group (European Americans).

Self-presentation concerns provide an alternative explanation for the findings in Studies 1 and 2. Social desirability and cultural norms prescribing modesty and humility may have discouraged Chinese and Asian Americans from presenting themselves in an overly favorable light (Bond, 1986; Heine et al., 1999). One also might argue that Chinese exhibited greater self-evaluative ambivalence than did European Americans,

not because they are more dialectical but because they possess lower self-esteem than do European Americans. Self-evaluative ambivalence and low self-esteem are related constructs. A person with low self-esteem will tend to endorse negative statements about the self and, hence, will generally exhibit more ambivalent self-evaluations than a person with high self-esteem who endorses few or no negative statements about the self.

However, it is important to note that ambivalence and low self-esteem (or self-criticism, negativity, etc.) are not equivalent constructs. To illustrate, an individual may possess relatively ambivalent low self-esteem or relatively unambivalent low self-esteem. Consider the following two cases. In case 1, a person possesses a negative self-esteem score of 7 (on a 1-7 scale) and a positive self-esteem score of 5 (on a 1-7 scale). This individual can be said to possess ambivalent low self-esteem: He or she exhibits strongly negative attitudes toward the self and moderately positive attitudes toward the self—*at the same time*. Overall, his or her global self-esteem score will be 3 (values ranging from 1 to 7) and his or her SIM score will be 8 (values ranging from -4 to 14).³ In case 2, an individual possesses a negative self-esteem score of 3 and a positive self-esteem score of 1. Again, his or her global self-esteem score will be 3 but his or her SIM score will be 0. The individual in the second case can be said to possess relatively unambivalent low self-esteem. The same logic applies to ambivalent high self-esteem and unambivalent high self-esteem. Hence, an ambivalence score conveys information about a person's self-evaluations that is not captured by his or her global self-esteem score.

We posit that fundamental dialectical epistemologies give rise to both self-evaluative ambivalence and low self-esteem among dialectical cultures. The dialectical tendency to endorse contradictory (negative) statements about the self contributes both to one's self-evaluative ambivalence score and to one's low self-esteem score. Nevertheless, because self-evaluative ambivalence and low self-esteem are somewhat confounded in Studies 1 and 2, we conducted two additional studies to show that dialecticism influences both psychological outcomes. In Study 3, we assessed naive dialecticism using an individual difference measure and we examined the relationship between dialecticism and psychological well-being. In Study 4, we manipulated naive dialecticism in a self-relevant domain and we examined its effect on psychological health.

STUDY 3

In Study 3, dialecticism was assessed as an individual difference variable using the Dialectical Self Scale (DSS; Spencer-Rodgers, Srivastava, & Peng, 2001). At the between-culture level of analysis, we hypothesized that

Chinese and Asian Americans would report higher mean scores on dialecticism, as well as lower self-esteem and psychological well-being than would European Americans. We further hypothesized that any observed group-level differences in self-esteem and well-being would be mediated, in part, by dialectical cognitive tendencies.

At the within-culture level of analysis, we examined the relationship between dialecticism, self-esteem, and psychological well-being within each culture separately. Dialectical and synthetic cognitive orientations are hypothesized to exist, with differing relative frequencies, in a broad range of groups (Peng & Nisbett, 1999). We anticipated that dialecticism would be related to lower self-esteem in each of the groups. To the extent that individuals in all three cultures embrace a relatively dialectical self-conception, they should report decreased psychological adjustment. Specifically, if dialectical thinkers attend to both positive and negative aspects of themselves and their lives, then this cultural dimension should be related to more ambivalent self-evaluations, decreased self-concept stability, and lower life satisfaction. Dialectical thinkers also emphasize and elaborate both positive and negative emotions (Bagozzi et al., 1999; Schimmack et al., 2002); hence, we anticipated that dialecticism would be related to greater negative affect, anxiety, and depression. Finally, dialecticism may have an indirect effect on psychological well-being, mediated through self-evaluative ambivalence. Greater ambivalence in one's self-orientation may lead to lower well-being judgments. To test the latter hypothesis, we examined the relationship between dialecticism, self-evaluative ambivalence, and the various indicators of psychological adjustment.

Method

PARTICIPANTS AND PROCEDURES

The American participants were students at UC Berkeley and UC Santa Barbara who volunteered to participate or who received course credit. Individuals who identified as Asian American ($N = 129$) or Caucasian ($N = 115$) were selected as the U.S. sample. They ranged in age from 18 to 42 ($M = 20.4$). Seventy-four percent of the sample was female. The Chinese participants ($N = 153$) were the same as those in Study 1.

MEASURES

The DSS (Spencer-Rodgers et al., 2001) assesses naive dialecticism in the domain of self-perception. We administered the brief version of the DSS, with the 14 items rated on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. Sample items include the following: (a) "I often find that things will contradict each other," (b) "When I hear two

sides of an argument, I often agree with both," and (c) "If there are two opposing sides to an argument, they cannot both be right" (reverse-scored). Based on our theoretical conceptualization, three factors were extracted (principal components analysis with varimax rotation), corresponding to contradiction (e.g., "When I hear two sides of an argument, I often agree with both"), cognitive change (e.g., "I often find that my beliefs and attitudes will change under different contexts"), and behavioral change (e.g., "I often change the way I am, depending on who I am with"). The factors explained 44% of the variance for Chinese, 48% for Asian Americans, and 52% for European Americans. Cronbach's alphas were .67 for Chinese, .73 for Asian Americans, and .82 for European Americans. The scale also has been shown to possess adequate reliability (α s ranging from .71 to .86) in other samples (Spencer-Rodgers et al., 2001).

Confirmatory factor analyses were conducted using the AMOS 4.0 structural equation modeling program (Arbuckle & Wothke, 1999). We assessed the overall fit of our hypothesized three-factor model and we compared this model to alternative models. First, we examined the three-factor model. The factor loadings (standardized regression weights) were all greater than .28 (ranging from .28 to .68, p s < .001) and the factors were significantly intercorrelated (contradiction/cognitive change $r = .46$, contradiction/behavioral change $r = .47$, and cognitive change/behavioral change $r = .70$, p s < .001). Assessment of model fit was based on four indices: the chi-square index, the Comparative-Fit Index (CFI), the Goodness-of-Fit Index (GFI), and the Root Mean Square Error of Approximation (RMSEA) (see Arbuckle & Wothke, 1999). For the three-factor model, the chi-square was 154.20, $p < .001$, the CFI was .90, the GFI was .95, and the RMSEA was .055. Taken together, these fit indices suggest that the three-factor model yielded adequate fit to the data. Next, we tested a two-factor model in which the two most highly correlated subscales were combined (cognitive change/behavioral change). This model yielded relatively poor fit to the data, $\chi^2 = 227.96$, $p < .001$, CFI = .82, GFI = .93, and RMSEA = .075. Moreover, a chi-square difference test indicated that the two-factor model resulted in significantly worse fit than the three-factor model, $\chi^2_{\text{DIF}} = 73.76$, $p < .001$. A one-factor model also resulted in relatively poor fit compared to the three-factor model, $\chi^2 = 264.32$, $p < .001$, CFI = .78, GFI = .92, RMSEA = .082, and $\chi^2_{\text{DIF}} = 110.13$, $p < .001$.

Self-esteem was assessed with items adapted from the Rosenberg (1965) Self-Esteem Scale. Positive, negative, and global self-esteem scores and SIM, CRM, and GTM indices were computed. Cronbach's alphas for global self-esteem were .69 for Chinese, .87 for Asian Americans, and .88 for European Americans. Self-concept sta-

bility was assessed with the Stability of Self Scale (Rosenberg, 1965) on a 1 (*not at all*) to 7 (*very much*) scale. Cronbach's alphas were .70, .90, and .91. Anxiety and depression were assessed with the Brief Symptom Inventory (Derogatis & Melisaratos, 1983) on a 1 (*rarely*) to 7 (*very frequently*) scale. Cronbach's alphas for anxiety were .78, .84, and .86, and for depression were .70, .69, and .76. Life satisfaction was assessed with the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) on a 1 (*not at all*) to 7 (*very much*) scale. Cronbach's alphas were .77, .87, and .86.

The Asian and European American participants also indicated the extent to which they had experienced 20 emotions ("during the past few weeks") on a 1 (*not at all*) to 7 (*very much*) scale. The positive emotions (adapted from Positive and Negative Affect Scale; Watson, Clark, & Tellegen, 1988) included joyful, proud, inspired, pleased, excited, affectionate, happy, enjoyment/fun, interested, and alert. Cronbach's alphas were .89 for Asian Americans and .90 for European Americans. The negative emotions were angry, frustrated, guilty, unhappy, worried/anxious, afraid, ashamed, distressed, irritable, and upset. Cronbach's alphas were .88 and .90. These participants also completed the TST (Kuhn & McPartland, 1954) and their responses were coded for valence (as outlined in Study 2). The coders agreed on 96% of the responses.

Results

The groups differed with respect to gender, $\chi^2 = 18.51$, $p < .001$, and age, $F(2, 394) = 4.21$, $p < .05$, and age was related to self-concept stability, $r = .11$, $p < .05$.

Between-culture analyses. An ANOVA on dialecticism revealed a significant effect of culture (see Table 3). A MANOVA on the dependent variables revealed significant effects of culture on most of the variables. In addition, there was a main effect of gender on life satisfaction, $F(1, 386) = 12.19$, $p < .001$. Women ($M = 4.29$) reported greater life satisfaction than did men ($M = 3.82$). There was no Culture \times Gender interaction. Hence, for the sake of simplicity, we combined women and men. A MANOVA also was conducted on the age-adjusted dependent variables and the pattern of cultural differences was the same. Hence, the age-unadjusted results are reported. Based on our a priori hypotheses, independent samples t tests were conducted and are presented in Table 3.

A separate MANOVA was conducted on positive and negative affect using culture (Asian vs. European American) and gender as the factors. There was a main effect of gender on positive affect, $F(1, 237) = 7.54$, $p < .01$, and a Culture \times Gender interaction, $F(1, 237) = 7.09$, $p < .01$. European American women ($M = 5.53$) scored higher

TABLE 3: Means, Standard Deviations, and Correlations With Dialecticism by Culture

	Chinese		Asian American		European American		df	F	Correlations With Dialecticism		
	M	(SD)	M	(SD)	M	(SD)			Chinese	Asian American	European American
Dialecticism	3.98 _a	(0.69)	3.89 _a	(0.65)	3.61 _b	(0.83)	384	8.62***	—	—	—
Positive SE	4.92 _a	(0.92)	5.12 _a	(0.95)	5.46 _b	(1.11)	392	9.89***	-.33***	-.28***	-.43***
Negative SE	4.30 _a	(0.96)	3.98 _{a,b}	(1.11)	3.99 _b	(1.27)	392	3.89*	.38***	.26**	.26**
Global SE	4.31 _a	(0.79)	4.57 _{a,b}	(0.92)	4.74 _b	(1.07)	392	7.48***	-.42***	-.30***	-.38***
SIM method	5.17 _a	(2.94)	4.53 _{a,b}	(2.96)	4.13 _b	(3.60)	392	3.69*	.31***	.25**	.17†
CRM method	7.17 _a	(1.77)	6.60 _b	(1.76)	6.56 _b	(2.15)	392	4.57*	.26**	.20*	.10
GTM method	9.10 _a	(1.26)	8.73 _b	(1.29)	8.62 _b	(1.63)	392	4.65**	.26**	.22*	.11
SC stability	3.85 _a	(1.11)	3.90 _a	(1.42)	4.34 _b	(1.48)	392	5.07**	-.50***	-.49***	-.53***
Anxiety	3.49 _a	(1.16)	3.45 _{a,b} †	(1.12)	3.20 _b †	(1.27)	392	2.15†	.43***	.29***	.28**
Depression	3.47 _a	(1.11)	3.40 _{a,b} †	(0.96)	3.27 _b †	(1.16)	392	1.18	.42***	.26**	.36***
Life satisfaction	3.15 _a	(1.18)	4.54 _b	(1.18)	4.78 _b	(1.26)	392	74.24***	-.17*	-.19*	-.31***
Positive affect	—		4.94 _a	(0.93)	5.34 _b †	(1.02)	237	2.21†	—	-.25**	-.37***
Negative affect	—		3.14 _a	(1.12)	3.45 _b	(1.30)	237	6.59*	—	.27**	.18†

NOTE: Subscripts a and b differ at $p < .05$; subscripts a and b† differ at $p < .15$. SE = self-esteem, SC stability = self-concept stability, SIM = Similarity-Intensity Model, CRM = Conflicting Reactions Model, GTM = Gradual Threshold Model.
 † $p < .15$. * $p < .05$. ** $p < .01$. *** $p < .001$.

than did Asian American women ($M = 4.94$), $t(179) = 4.27$, $p < .001$. European American men ($M = 4.76$) did not differ from Asian American men ($M = 4.93$).⁴

Within-culture analyses. As predicted, dialecticism was related to decreased self-esteem and well-being across each of the groups (see Table 3). Dialecticism was also significantly associated with greater self-evaluative ambivalence (SIM, CRM, and GTM scores) on the TST among Asian Americans (r s from .20 to .25, p s $< .05$) but not European Americans (r s from .10 to .17, ns).

Mediational analyses. Dialecticism mediated the relationship between culture (Euro-American = 0, Asian American = 1, and Chinese = 2) and self-esteem. First, the criterion of negative self-esteem was regressed on culture, $b = .12$, $p < .05$, then dialecticism was regressed on culture, $b = .20$, $p < .001$, and then the criterion was regressed on culture, $b = .05$, ns , and dialecticism, $b = .30$, $p < .001$, simultaneously. Hence, when we controlled for dialecticism, the relationship between culture and negative self-esteem dropped to nonsignificance (Δ change in $b = .07$, $p < .05$). The associations between culture and positive self-esteem, $b = -.22$, $p < .001$, and culture and global self-esteem, $b = -.19$, $p < .001$, were also partially mediated by dialecticism (Δ b s = .06, .08; p s $< .05$). As indicated in Table 4, additional mediational analyses were conducted with self-evaluative ambivalence, self-concept stability (after controlling for age), and life satisfaction (after controlling for gender).

Finally, dialecticism had an indirect effect on well-being, mediated through self-evaluative ambivalence (SIM scores). Specifically, the relationship between dialecticism and life satisfaction, $b = -.27$, $p < .001$, dialecti-

TABLE 4: Results of Mediational Analyses

	Culture Criterion ^a	Culture Criterion ^b	Dialect Criterion ^b	Change Δb
Criterion				
SIM method	.14**	.08	.24***	.06*
CRM method	.14**	.07	.18***	.07*
GTM method	.15**	.09	.19***	.06*
SC stability	-.16**	-.05	-.50***	.11*
Life satisfaction	-.45***	-.42***	-.19***	.03

NOTE: SC stability = self-concept stability, SIM = Similarity-Intensity Model, CRM = Conflicting Reactions Model, GTM = Gradual Threshold Model.

a. b for criterion regressed on culture.

b. Partial b for criterion regressed on culture and dialecticism simultaneously.

* $p < .05$. ** $p < .01$. *** $p < .001$.

cism and anxiety, $b = .35$, $p < .001$, and dialecticism and depression, $b = .36$, $p < .001$, dropped significantly when we controlled for self-evaluative ambivalence (Δ b s = .05, .08, and .07, p s $< .05$).

Discussion

In Study 3, we measured the theoretical cultural variable of interest, we assessed different groups so that they could be placed along a continuum of the cultural dimension, and we tested predictions relating dialecticism to various psychological indicators across cultures. At the between-culture level of analysis, we found that Chinese reported lower global self-esteem, self-concept stability, and life satisfaction than did a synthesis-oriented culture. Likewise, they exhibited more negative self-esteem, self-evaluative ambivalence, and they

tended to report greater anxiety and depression than did European Americans. Asian Americans tended to possess moderate scores relative to Chinese and European Americans on each of the indicators. Furthermore, dialecticism fully or partially mediated the link between culture and self-esteem (positive, negative, and global self-esteem), self-evaluative ambivalence, and self-concept stability. Dialecticism also was found to have an indirect influence on anxiety, depression, and life satisfaction, mediated through increased self-evaluative ambivalence.

At the within-culture level of analysis, the correlational findings revealed a few notable differences. Among Chinese, dialecticism tended to be more highly correlated with negative indicators of adjustment, including negative self-esteem, anxiety, and depression, whereas among European Americans, dialecticism tended to be related to a decreased emphasis on the positive aspects of one's self and one's life, including positive self-esteem, positive affect, and life satisfaction (a positively keyed instrument). These findings suggest that dialecticism, although extant in many cultures, may have different psychological implications for different cultural groups.

Cultural differences in self-concept clarity (Campbell et al., 1996) provide an alternative explanation for the findings. Campbell and colleagues found that the self-concept is less clearly and confidently defined, internally consistent, and temporally stable among Japanese than Americans, and lower self-esteem is related to lower self-concept clarity. On the other hand, it is important to note that dialecticism and self-concept clarity are distinct constructs. Naive dialecticism is a broader construct or culturally shared folk epistemology, which influences the nature and structure of the self-concept, as well as a wide range of cognitive processes, including attribution, categorization, and social perception, among others (Choi & Choi, 2002; Peng & Nisbett, 1999). Second, the present studies examined the extent to which Chinese possess ambivalent self-views rather than a lack of clarity in one's self-conceptions. Dialectical thinkers may hold very clear and confident self-beliefs, which are evaluatively contradictory.

The findings from Studies 1 through 3 converge on the notion that dialectical cultures possess more evaluatively inconsistent self-attitudes than do synthesis-oriented cultures. Mean levels of naive dialecticism were higher among dialectical cultures and group-level differences in self-esteem and well-being were attributable, in part, to underlying cultural differences in reasoning about psychological contradiction. Furthermore, dialecticism was associated with greater self-evaluative ambivalence on the open-ended TST among Asian Americans. Nevertheless, the causal relations among the variables

remain uncertain, given the correlational nature of these data. Therefore, we conducted a fourth study in which we manipulated naive dialecticism in a self-relevant domain.

STUDY 4

In Study 4, we primed naive dialecticism among Chinese and European Americans. Dialecticism is thought to influence a broad range of cognitive processes, including attribution, categorization, and so on (Choi & Choi, 2002; Peng & Nisbett, 1999). In Study 4, we manipulated dialecticism in an area germane to self-perception by asking participants to think about and to describe experiences that had both positive and negative consequences for the self. Because East Asians are more interdependent than are Westerners (Markus & Kitayama, 1991), contradictory events that lack interpersonal consequences may be less culturally relevant for Chinese. Therefore, we also asked participants to recall experiences that had both positive and negative consequences for "the people you care about."

We sought to prime several aspects of naive dialecticism. East Asian ontologies tend to view the world as contradictory, unpredictable, and in constant flux (Peng & Nisbett, 1999). To activate an analogous mode of thinking, we asked participants to think about personal experiences that were ambivalent (equally positive and negative) and uncertain. A primary feature of dialectical thought is the tolerance of contradiction or, more specifically, the absence of integration and synthesis (Peng & Nisbett, 1999). To create a state of ambivalence, without resolution, we asked participants to recall experiences in which "there were no right answers." Finally, participants were encouraged to think holistically, that is, to think through all of the possible perspectives, including the opposing ones.

We hypothesized that the dialectical prime would be associated with decreased positive self-esteem, global self-esteem, and life satisfaction, as well as greater negative self-esteem and self-evaluative ambivalence. As in Study 3, we anticipated that increased dialecticism would be related to decreased psychological adjustment in both cultures. However, we predicted that these effects would be stronger among Chinese than European Americans.

Method

PARTICIPANTS AND PROCEDURES

The Chinese participants (32 women, 21 men) were students at Peking University who participated at the request of their instructor. They ranged in age from 18 to 24 ($M = 19.8$). The American participants were students at UC Santa Barbara who participated during their regu-

TABLE 5: Means, Standard Deviations, and Self-Evaluative Ambivalence Scores by Culture and Condition

	Chinese				European American				F Culture	F Condition
	Control		Prime		Control		Prime			
Positive SE	5.51 _a	(0.95)	5.04 _a	(1.04)	5.72 _c	(0.86)	5.59 _c	(0.85)	4.54*	2.77
Negative SE	3.52 _a	(0.48)	4.22 _b	(1.11)	2.71 _c	(0.91)	3.30 _c	(1.29)	20.13***	11.15***
Global SE	4.53 _a	(0.55)	4.00 _b	(0.83)	5.02 _c	(0.73)	4.67 _c	(0.92)	14.94***	8.86**
SIM method	4.78 _a	(1.56)	5.99 _b	(2.34)	2.26 _c	(3.04)	3.73 _c	(3.55)	20.36***	6.45*
CRM method	6.90 _a	(0.83)	7.63 _b	(1.42)	5.35 _c	(1.68)	6.31 _c	(2.13)	21.77***	7.53**
GTM method	9.00 _a	(0.56)	9.46 _b	(0.91)	7.79 _c	(1.25)	8.45 _c	(1.59)	25.02***	6.26*
Life satisfaction	3.74 _a	(1.22)	3.36 _a	(1.18)	5.21 _c	(1.07)	4.77 _c	(1.14)	41.56***	3.34

NOTE: Subscripts a and b differ at $p < .05$, $df = 103$. SE = self-esteem, SIM = Similarity-Intensity Model, CRM = Conflicting Reactions Model, GTM = Gradual Threshold Model.

* $p < .05$. ** $p < .01$. *** $p < .001$.

larly scheduled classroom periods. Individuals who identified as European American (39 women, 15 men) were selected as the sample. They ranged in age from 18 to 31 ($M = 20.7$).

Participants in the experimental condition were provided with a questionnaire packet, which included the following instructions (adapted from Parker-Tapias & Peng, 2001):

Life can be full of contradiction and uncertainty. We would like you to reflect, in writing, on a time in your life when it was full of contradiction and uncertainty. . . . We would like you to recall experiences in which you were very aware of both the pros and cons of the situations and there were no right answers. The situations or experiences had positive outcomes and consequences for you (and the people you care about) as well as equally negative outcomes or consequences for you (and the people you care about). Think about these contradictory experiences . . . describe how you thought through all of the facts and possible perspectives, including the opposing ones.

The instructions appeared at the top of the first page and were followed by 30 blank lines. Participants rated both the perceived positivity and negativity of the experiences, as follows, "Just thinking about the positive aspects of these experiences, how positive were they for you?" rated on a 0 (*not at all positive*) to 6 (*extremely positive*) scale, and "Just thinking about the negative aspects of these experiences, how negative were they for you?" rated on a 0 (*not at all negative*) to 6 (*extremely negative*) scale. Participants then completed measures of naive dialecticism, self-esteem, and life satisfaction (as outlined in Study 3). Positive, negative, and global self-esteem scores and SIM, CRM, and GTM indices were computed. Cronbach's alphas for dialecticism were .73 for Chinese and .86 for European Americans; for global self-esteem, alphas were .83 and .90; and for life satisfaction, alphas were .76 and .85.

Results

The groups did not differ with respect to gender. They differed with respect to age, $F(1, 105) = 4.72$, $p < .05$, however, age and gender were not related to any of the variables.

Valence. Chinese rated the experiences as more positive ($M = 4.57$) than negative ($M = 3.10$), $t(20) = 3.93$, $p < .001$, and European Americans also tended to rate the experiences as more positive ($M = 4.04$) than negative ($M = 3.21$), $t(27) = 1.53$, $p = .14$. Notably, Chinese perceived the experiences as somewhat more positive than did European Americans, $t(47) = 1.30$, $p = .20$. There were no cultural differences for the negative ratings. An ambivalence score also was computed according to the SIM method using the positive and negative ratings as the S and L values. Chinese ($M = 4.14$) rated the experiences as significantly more ambivalent than did Americans ($M = 2.04$), $t(47) = 2.10$, $p < .05$.

Manipulation check. An ANOVA on dialecticism revealed a main effect of culture, $F(1, 98) = 9.39$, $p < .01$, such that Chinese ($M = 4.03$) scored higher than did European Americans ($M = 3.51$). There was a marginally significant effect of condition, $F(1, 98) = 3.30$, $p = .072$. Moreover, Chinese in the dialectical-prime condition ($M = 4.19$) tended to score higher on dialecticism than did Chinese in the control condition ($M = 3.83$), $t(50) = 1.87$, $p = .067$. European Americans in the dialectical-prime ($M = 3.59$) scored (nonsignificantly) higher on dialecticism than did those in the control condition ($M = 3.48$). Because Chinese represent a highly dialectical culture (Peng & Nisbett, 1999), this cognitive orientation may be more easily primed among Chinese than European Americans.

A MANOVA revealed significant effects of culture and condition on most of the dependent variables (refer to F values in Table 5). Although the Culture \times Condition interactions were not significant, based on our a priori

hypotheses, paired samples *t* tests were conducted and are reported in Table 5. Chinese in the dialectical-prime condition scored significantly higher than did Chinese in the control condition on negative self-esteem, the SIM, CRM, and GTM indices, and they scored significantly lower on global self-esteem. As illustrated in Table 5, European Americans in the dialectical-prime condition did not differ significantly from European Americans in the control condition on any of the dependent variables.

Discussion

To examine the causal relations between naive dialecticism, self-esteem, and psychological well-being, we manipulated naive dialecticism in a prototypical Eastern dialectical and Western synthesis-oriented culture. Chinese in the dialectical-prime condition tended to score higher on dialecticism and they exhibited lower global self-esteem, greater self-evaluative ambivalence, and they tended to report less satisfaction with their lives than did Chinese in the control condition. The effects were in the same direction, but were not significant, among European Americans.

Chinese appear to tolerate and accept negative self-relevant experiences more readily than do European Americans. However, the present findings were not simply due to a general negativity bias among Chinese. First, the manipulation check suggests that Chinese were thinking more dialectically in the experimental than in the control condition. Second, Chinese rated the self-generated contradictory experiences as significantly more ambivalent than did Americans. Finally, both cultures tended to view the experiences as somewhat more positive than negative, on the whole, and Chinese were especially inclined to rate the experiences as favorable. If Chinese were simply more negative in their cognitive orientation than were Americans, then one would expect that they would have rated the self-generated contradictory experiences as less favorable than did European Americans. It is also noteworthy that Chinese tended to rate the experiences as more positive than did European Americans, and yet the dialectical-prime had stronger adverse effects on well-being among Chinese.

Rather than reflecting a general negativity bias, we posit that this pattern of findings is indicative of a lack of integration or synthesis among Chinese. Because contradiction, ambivalence, and uncertainty are regarded as more desirable and normative among dialectical than synthesis-oriented cultures, Chinese more readily tolerate inconsistencies in their cognitions and emotions than do Americans (Peng & Nisbett, 1999). When asked to think about ambivalent or both-valenced self-relevant experiences, Chinese were less inclined to reconcile the

evaluatively inconsistent events, and as a result, they reported lower psychological adjustment than did European Americans.

GENERAL DISCUSSION

A large number of studies have found that East Asians and East Asian minorities report lower self-esteem, poorer life satisfaction, and greater anxiety, depression, and pessimism than do Western cultures (Crocker et al., 1998; Diener & Diener, 1995; Heine & Lehman, 1997a; Kitayama et al., 2000; Lee & Seligman, 1997). The present research provides an additional theoretical, cultural account for why these group-level differences may exist. Western synthetic thinking encourages the resolution of incongruity (e.g., positive and negative personal feedback) and the integration of inconsistent appraisals of the self. In contrast, Eastern dialectical thinking encourages the acceptance of opposing judgments of satisfaction with oneself and one's life and greater tolerance of positive and negative emotional experiences. The duality of the dialectical self-concept, in turn, points to the potential dual nature of self-esteem and well-being.

Measurement Issues: Unidimensional Versus Bidimensional Scales

Cultural differences in dialectical versus synthetic thinking have important implications for the manner in which we conceptualize and measure psychological well-being across cultures. A fundamental assumption of most psychological instruments is that a single, summary score accurately captures and reflects a person's overall level of adjustment. Well-being measures are designed to obtain a global assessment of an individual's overall degree of happiness (Diener et al., 1985, 1995). Some self-esteem and well-being instruments are composed of a single item and others have no negatively keyed items. As such, they impose an important constraint on the manner in which dialectical thinkers can respond. Even measures that explicitly assess both positive and negative aspects of well-being, such as the PANAS (Watson et al., 1988), assume that a single, summary score can be obtained for an individual by summing, subtracting, or averaging the positive and negative components of well-being. The assumption that a global summary judgment can be readily made on a single-item measure, or calculated and inferred from a participant's positive and negative responses on an instrument, reflects a fundamentally nondialectical approach to the assessment of self-esteem and well-being.

Psychological measures that are balanced in terms of their response direction allow for the possibility of two evaluative dimensions. Substantial research, conducted primarily with North American samples using confirma-

tory factor-analytic techniques, suggests that instruments such as the Rosenberg (1965) Self-Esteem Scale are unidimensional in structure (e.g., Tomas & Oliver, 1999). However, East Asian samples have sometimes revealed two evaluative (positive/negative) factors, suggesting that self-esteem among East Asians consists of two rather than a single dimension (e.g., Farh & Cheng, 1997). In addition to method factors and other psychometric considerations (e.g., translation difficulties), we propose a cultural explanation for this phenomenon. Rather than constituting a methodological artifact, we contend that the bidimensionality of self-esteem assessments reflects a fundamental dialectical epistemology. Positive and negative self-attitudes may be conceptually, and in certain instances empirically, distinct constructs among dialectical cultures.

Subjective well-being scales also have been found to possess lower internal consistency and temporal reliability among East Asians (Shao, 1993, cited in Diener et al., 1995). The greater fluidity and changeability of the dialectical self-concept implies that Chinese and other groups will be less consistent in their responses on a psychological instrument over time. East Asian samples also may yield lower Cronbach's alphas because dialectical thinkers tend to endorse both positive and negative items on measures of adjustment. This acquiescence may reflect underlying cultural differences in reasoning about psychological contradiction rather than simply a response bias (Choi & Choi, 2002). Across all four studies, Chinese exhibited greater ambivalence in their self-orientation than did European Americans, and increased dialecticism was related to more evaluatively inconsistent self-appraisals.

Self-esteem and well-being in East Asian cultures may be better conceptualized as two-dimensional, dynamic constructs that change over time and context. Perhaps, in dialectical cultures, negative evaluations of the self, one's life, and so on should be assessed and examined separately from positive appraisals, in addition to obtaining global summary judgments. Given a cognitive tendency to acknowledge and accept negativity, self-esteem and well-being among Eastern dialectical cultures may be more dependent on the perceived presence or absence of negative factors, such as unfavorable personal qualities, social conflict, or ingroup disapproval (Diener & Diener, 1995; Kitayama et al., 1997). For example, the perceived absence of negative personal attributes reliably predicted well-being judgments among Japanese, whereas appraisals of the self as having positive qualities did not correlate significantly with the criterion (Kitayama & Karasawa 1995, cited in Kitayama et al., 1997). If well-being is a two-dimensional, dynamic construct, which is strongly influenced by temporal and

situational factors, then a process approach to psychological assessment also may be more appropriate for dialectical cultures (see Seidlitz, Wyer, & Diener, 1997).

The relationship between positive and negative aspects of psychological adjustment is not yet well understood from a cross-cultural perspective and is an important topic for further research. For instance, additional studies are needed to determine the extent to which dialecticism influences online as well as global self-report judgments of well-being. Our findings suggest that greater attention be paid to the evaluative direction and dimensionality of the criteria that are used in cross-cultural assessments of well-being. Positive appraisals, negative appraisals, and global summary scores may convey distinct and valuable information regarding psychological adjustment.

Well-Being Among Dialectical Cultures

Whether Chinese and other East Asian cultures truly possess inferior psychological well-being relative to Westerners is an important issue. Are dialectical thinkers genuinely less satisfied with themselves and their lives than are synthetic thinkers? If East Asians tend to be dialectical in their cognitive orientation, what criteria should be used as ecologically valid indicators of adjustment in these groups? These questions may be approached from several different perspectives. One theoretical viewpoint argues that cultural differences in judgments of self-worth should not be interpreted as implying true underlying differences in mental health (Diener & Diener, 1995; Heine & Lehman, 1999; Kitayama et al., 1997). Although dialectical cultures more readily acknowledge and accept the coexistence of good and bad in themselves and their lives, this should not be construed as reflecting serious maladjustment.

Historically, ambivalence has been viewed as a negative psychological state that is associated with psychological distress, neuroticism, and even schizophrenia (Simpson & Weiner, 1989; Thompson et al., 1995). It is reasonable to expect that contradictory self-appraisals would be distressing for individuals whose cultural mandate prescribes that they hold highly positive and consistent self-evaluations. In North American samples, balanced (positive/negative) self-appraisals and self-discrepancies are generally associated with anxiety and depression (Higgins, 1987; Taylor & Brown, 1988). The coexistence of contradictory attitudes and emotions may cause less psychic tension and conflict among Chinese and other East Asian cultures, and ultimately, ambivalent self-views may have less serious mental health consequences for these groups because overly positive and consistent self-evaluations are not normatively prescribed in society (Diener et al., 1995; Heine et al., 1999;

Suh, 2002). Some research suggests that negative self-evaluations and emotional conflict have less detrimental mental health implications for East Asians. For example, actual-ideal self-discrepancies are less highly correlated with depression among Japanese (Heine & Lehman, 1999), and emotional conflict is unrelated to life satisfaction among Chinese but negatively correlated with the criterion among Americans (Suh, 1994, as cited in Suh et al., 1998).

A second theoretical perspective posits that East Asians truly possess certain deficits in psychological adjustment relative to Westerners because East Asians are more likely to focus on negative factors, including their personal inadequacies. Even though dialectical cultures more comfortably tolerate both good and bad aspects of the self, the increased emphasis on negative elements leads to poor adjustment. This perspective emphasizes mean-level differences in self-esteem and well-being between Eastern and Western samples and the absolute (rather than relative) size of the correlations between self-criticism and maladjustment. Taylor and Brown (1988) argued that positive illusions about the self are adaptive for mental health. Self-enhancement biases tend to be positively correlated with well-being indicators, whereas accurate self-knowledge and balanced self-appraisals are generally related to psychological ill health (Higgins, 1987; Taylor & Brown, 1988). In absolute terms, these associations tend to hold for both Eastern and Western samples (e.g., Heine & Lehman, 1999). In Study 3, we found that self-evaluative ambivalence was strongly related to anxiety and depression in all three cultures. A lack of unrealistically positive self-evaluations may be construed as having some negative mental health implications for East Asians (Heine & Lehman, 1999).

A third theoretical viewpoint acknowledges that East Asians possess lower self-esteem and well-being than do Westerners but maintains that these psychological constructs are less culturally relevant in East Asian societies. Diener and Diener (1995) noted that "life satisfaction itself is less likely to be a salient concept for the collectivist" (p. 662) and Heine and colleagues assert that esteeming the individual self is a primarily Western preoccupation (Heine et al., 1999). Acknowledging and accepting the good and bad in self, and fulfilling the cultural demands of fitting in and adapting to others, may be more important to the integrity of the self than is maintaining a favorable self-image (Diener & Diener, 1995; Heine et al., 1999; Markus & Kitayama, 1991; Oishi et al., 1999). Western notions of self-enhancement may even be maladaptive in many East Asian cultures (Bond, 1986; Heine et al., 1999; Markus & Kitayama, 1991). Positive illusions about the self violate the dialectical norms of inner balance and harmony (yin/yang) and they have

detrimental consequences for interpersonal relations in collectivist societies.

Well-Being Among East Asian Minorities

The present findings also have important implications for research on social stigma. Historically, low levels of self-esteem among East Asian minorities have been attributed to perceptions of prejudice and other correlates of minority status. Scholars have often assumed that minorities would possess lower self-worth than dominant group members because they "internalize" prejudicial evaluations (for a review, see Crocker et al., 1998). Our findings suggest that low self-esteem among Asian Americans is due, in part, to cultural differences in reasoning about psychological contradiction rather than to their minority status in society. In Study 1, we found that Asian Americans reported positive, negative, and global self-esteem scores comparable to those of a prototypical dialectical culture and, in Study 3, dialecticism was related to decreased self-esteem and well-being among Asian Americans.

Dialecticism and Interdependent Self-Construals

The pattern of findings in Studies 1 and 2 is also generally consistent with self-enhancement and self-effacement biases found in independent and interdependent cultures (Heine et al., 1999; Kitayama et al., 1997). Individualists tend to elaborate positive views of the self, whereas collectivists tend to emphasize their shortcomings to bolster group cohesiveness and harmony in collectivist societies (Heine et al., 1999; Kitayama et al., 1997). Nevertheless, cultural tendencies toward self-enhancement and self-criticism, alone, do not appear to fully account for the East-West variance in self-esteem and well-being. In addition to varying on the cultural dimension of interest, the groups in Study 1 are known to differ on interdependent self-construals. Chinese constitute a highly dialectical and interdependent/collectivist culture; Latinos represent a nondialectical culture, yet they are more interdependent/collectivist than are European Americans (Triandis, 1995); and European Americans represent a prototypical synthesis-oriented and independent/individualist culture (Peng & Nisbett, 1999; Triandis, 1995). It is notable that although Latinos represent a relatively interdependent culture, they exhibited more polarized self-views than did European Americans (see Figure 1). Other scholars have noted that many strongly interdependent cultures, such as Chileans and Brazilians, score substantially higher on self-satisfaction than do many East Asian groups (Diener & Diener, 1995), suggesting that factors other than collectivism account for decreased levels of self-esteem among East Asians.

In an experimental study, Japanese were found to exhibit more ambivalent (equally positive and negative) self-statements on the TST than did Americans, across all four conditions designed to activate different aspects of the relational self-concept (Kanagawa et al., 2001). There was a strong main effect of culture, suggesting that relational self-construals do not fully account for the greater negative self-appraisals among Japanese. In addition to self-critical tendencies, these findings may be indicative of a dialectical cognitive tendency to acknowledge and accept both favorable and unfavorable aspects of the self. Perhaps, interdependent cultural norms and dialectical cognitive tendencies interact to produce greater self-evaluative ambivalence among certain East Asian cultures, such as Japanese.

Multiple Determination

Low levels of self-esteem and well-being among East Asian cultures are likely due to multiple cultural factors, including interdependence/collectivism (Heine et al., 1999), cultural norms (Diener et al., 1995), and naive dialecticism (Peng & Nisbett, 1999). East Asians do not strive to maintain an overly positive view of the self (Heine et al., 1999; Heine & Lehman, 1997a) and this is likely due to both dialectical and interdependent tendencies. A dialectical cognitive orientation and interdependent cultural norms encourage the acceptance of negative self-relevant feedback, personal inadequacies, and negative emotions (Bagozzi et al., 1999; Heine et al., 1999; Kitayama et al., 2000; Schimmack et al., 2002). The dialectical principle of change and the interdependent-self perspective are also congruent in that both cultural theories conceptualize the self-concept as dynamic, internally inconsistent, contextually flexible, and responsive to others. A dialectical cognitive orientation, collectivist norms prescribing self-effacement, and interdependent goals of maintaining harmonious relationships may have additive or interactive effects on judgments of well-being among East Asians.

Naive dialecticism promises to expand our understanding of the evaluative components of the self-concept and East-West differences in psychological well-being. Over four studies, Chinese exhibited greater ambivalence in their self-reported and open-ended self-descriptions than did European Americans, and dialecticism mediated the association between culture and decreased psychological adjustment. Rather than implausible, illogical, or maladjusted, dialectical cultures more comfortably acknowledge and accept contradictory appraisals of the self. Embracing the good and bad in all things (yin/yang) is regarded as normative and adaptive in East Asian dialectical cultures. For dialectical cultures, and dialectically oriented individuals within various cultures, the integrity of the self may be depend-

ent on a balance of opposing forces and the harmonious coexistence of positive and negative cognitions, emotions, and experiences.

NOTES

1. To encourage participation in the study, a brief 6-item version of the scale was administered to some of the U.S. participants.

2. Because division by 0 is undefined, 25 participants who had listed no negative self-statements on the TST were not included in these analyses.

3. Global self-esteem is computed as the average of a participant's positive self-esteem score and reversed negative self-esteem score.

4. Positive and negative affect tended to be less strongly correlated among Asian Americans, $r = -.18$, $p < .05$, than European Americans, $r = -.32$, $p < .001$, with $z = -1.15$, $p = .13$.

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