Culture-Specific Patterns in the Prediction of Life Satisfaction: Roles of Emotion, Relationship Quality, and Self-Esteem

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This study was conducted to explore the culture-specific roles of emotion, relationship quality, and self-esteem in determining life satisfaction. It was hypothesized that maintaining good interpersonal relationships would make individuals in collectivistic cultures not only feel good about their lives but also feel better about themselves. Furthermore, two emotion variables—emotional expression and emotion differentiation—were proposed as possible determinants of relationship quality. It was hypothesized that emotional expressiveness would be more important for maintaining good interpersonal relationships in individualistic societies but emotion differentiation would be more important in collectivistic cultures. These hypotheses were tested with Euro-American, Asian American, Korean, and Chinese groups using multigroup analyses in a structural equation model. Results supported all proposed hypotheses and indicated that emotion differentiation contributes to maintaining good interpersonal relationships in collectivistic cultures, which contributes to self-esteem and satisfaction with life.

Keywords: *culture; emotion; interpersonal relationships; life satisfaction*

Cultural differences in life satisfaction have been well documented (e.g., Diener & Diener, 1995; Michalos, 1991; Myers & Diener, 1995). One major finding is that individuals in collectivistic cultures report lower life satisfaction than people in individualistic cultures. Various explanations have been offered for this difference (e.g., Diener & Lucas, 2000; Diener & Suh, 1999; Diener, Suh, Smith, & Shao, 1995), such as differences in resources to meet basic needs, upward or downward comparison among societies, and cultural differences in valuing personal happiness. However, less attention has been paid to another kind of cross-cultural difference: relative importance of predictors that contribute to life satisfaction.

Life satisfaction is a multifaceted construct that refers to one's overall evaluation of life domains such as health, finances, job, self-esteem, and interpersonal relationships (Michalos, 1991). Societies differ in the emphasis they place on certain values and resources, so it seems likely that the life satisfaction levels of members in various societies are influenced to different degrees by various predictors of life satisfaction. Two predictors of life satisfaction—self-esteem and the quality of interpersonal relationships, which is defined as maintaining good interpersonal relationships with others—have

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received much attention from cross-cultural psychologists because the core priorities of individualism (e.g., independence and uniqueness) and collectivism (e.g., fitting into a web of interpersonal relationships) are closely associated with self-esteem and relationship quality, respectively (Markus & Kitayama, 1991; Triandis, 1989).

The main purpose of the present study is to explore culture-specific patterns in the prediction of life satisfaction, focusing on the relative importance of relationship quality in collectivistic cultures. To address this goal, we first argue that previous studies failed to reveal important culture-specific patterns because of (a) misspecifications of models that predict life satisfaction and (b) assessing relationship quality based on only a few close relationships. As an alternative model, we propose that relationship quality predicts not only life satisfaction but also self-esteem in collectivistic societies when a new measure of relationship quality is employed. We also demonstrate the significant roles of emotion in the culture-specific psychological processes that determine relationship quality and self-esteem.

RELATIVE IMPORTANCE OF RELATIONSHIP QUALITY IN COLLECTIVISTIC CULTURES

A review of previous studies on life satisfaction, self-esteem, and relationship quality reveals somewhat perplexing findings: Although the importance of maintaining good interpersonal relationships in collectivistic cultures has been underscored by a number of theorists (e.g., Markus & Kitayama, 1991; Triandis, 1989), empirical studies have not seemed to support that argument. For example, Diener and Diener (1995) were among the first to discuss the relative contributions of self-esteem and interpersonal relationships to life satisfaction in individualistic and collectivistic cultures. After analyzing data from 31 countries (Michalos, 1991), they found that self-esteem was a more important predictor of life satisfaction in individualistic than in collectivistic societies. This finding was consistent with expectations derived from the core assumptions of individualism. However, Diener and Diener (1995) also found no difference in the association between family satisfaction and life satisfaction between individualistic and collectivistic societies. Furthermore, the relation between friendship satisfaction and life satisfaction was much stronger in individualistic than in collectivistic cultures. This made it seem that quality of interpersonal relationships might actually matter more in individualistic than in collectivistic cultures.

The results from Kwan, Bond, and Singelis's study (1997) also did not support the importance of relationship quality in collectivistic societies. After proposing a model in which self-esteem and relationship harmony independently predict life satisfaction, Kwan et al. tested the model using a multigroup analysis in a structural equation model. The data from college students in the United States and Hong Kong suggested that whereas self-esteem was a more important predictor of life satisfaction than relationship harmony among students in the United States, the two domains contributed *equally* to life satisfaction among students in Hong Kong. Their results were replicated by Uchida, Kitayama, Mesquita, and Reyes (2001). Although Uchida et al.'s concepts were somewhat different from those of Kwan et al. (i.e., happiness and perceived social support instead of life satisfaction and relationship harmony), Uchida et al. obtained a comparable pattern of results: Self-esteem was more important than perceived social support in predicting happiness in the U.S. sample, whereas these two factors contributed *equally* to happiness in samples from Japan and the Philippines.

These studies suggest that relationship quality is not as important in collectivistic cultures as theories of individualism and collectivism have implied (Kagitcibasi, 1995; Markus & Kitayama, 1991; Triandis, 1989, 1995), at least where the prediction of life satisfaction is concerned. However, this conclusion may be premature. Careful examination of the previous studies suggests to us that the relation between self-esteem and relationship quality was incorrectly conceptualized in their structural equation models, which led to underestimation of the importance of relationship quality in predicting life satisfaction.

REFINING THE RELATION BETWEEN SELF-ESTEEM AND RELATIONSHIP QUALITY

In Kwan et al.'s study (1997), self-esteem and relationship harmony were constrained to be independent, which was supported by their data. Kwan et al. did not provide the reasoning behind this independence hypothesis but the hypothesis might make sense from an individualistic perspective. It has been argued that self-esteem in individualistic cultures is based mainly on personal achievement and self-expression (Markus & Kitayama, 1991), as depicted in "expressive individualism" (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985). Having good relationships with others might not necessarily boost self-esteem in those societies, although it certainly contributes to life satisfaction. However, this independence hypothesis may not work in collectivistic cultures because maintaining harmonious interpersonal relationships with others may be important for both self-esteem and life satisfaction: If the basic value of collectivism is connectedness with others and maintaining good interpersonal relationships with others is considered to be "a culturally mandated task" (Markus & Kitayama, 1991, p. 230), performing the task successfully

should lead members of collectivist societies to feel better about themselves, as self-efficacy theories imply (Bandura, 1982).

This analysis implies that Kwan et al.'s model should be modified by adding a path from relationship quality to self-esteem for collectivistic societies. If this path is supported by data, it would help to explain why relationship quality is so important in collectivistic cultures because it has both direct and indirect (mediated through self-esteem) influences on life satisfaction.

REDEFINING THE RANGE OF INTERPERSONAL RELATIONSHIPS

Our modified hypothetical model, however, seems to be at odds with existing studies. We would expect the association between relationship quality and self-esteem to be stronger in collectivistic cultures. Contrary to this expectation, a culture-invariant association between the two variables has been documented. For example, Diener and Diener (1995) found that the associations between self-esteem and satisfaction with family/friend relationships were not much different in collectivistic and individualistic cultures (as displayed in Table 4 on p. 658). Endo, Heine, and Lehman (2000) also reported that correlations between self-esteem and evaluation of one's own interpersonal relationships were similar among European Canadians (r = .17, .26, –.11 for family member, best friend, and romantic partner, respectively) and Japanese (r = .14, .24, –.10, respectively). Furthermore, Uchida et al. (2001) reported that the coefficients for the path leading from social support to self-esteem in their multigroup analyses were not significantly different for respondents in the United States, the Philippines, and Japan (.44, .36, and .28, respectively).

Close examination reveals, however, that the previous studies shared one common feature that might explain why a culture-invariant pattern was found. All of the measures used in those studies assessed only close relationships by asking participants to think about or rate their relationships with family members, a romantic partner, or a best friend (e.g., Endo et al., 2000). The Perceived Social Support Scale used by Uchida et al. (2001) instructed participants to imagine a person who was close to them, such as a parent, sibling, friend, or significant other, and rate the degree of social support received from that particular person.

Close relationships are presumably important to individuals in most societies (Oyserman, Coon, & Kemmelmeier, 2002): Regardless of cultural background, close relationships play an essential role in human life. Moreover, close relationships should play a role in shaping self-esteem (Leary, 2002; Leary & Baumeister, 2000; Leary & Downs, 1995) because individuals incorporate other people's perceptions into their sense of self (Aron & Aron, 1996). We suspected that the culture-invariant association between self-esteem and the perception of close relationships reflects the culture-invariant role of close relationships in human life and effects of close relationships on self-esteem.

Nonetheless, if members of collectivistic cultures place greater value on maintaining harmonious interpersonal relationships with others than do people in individualistic societies (Kagitcibais, 1995; Markus & Kitayama, 1991; Triandis, 1989), this cultural difference should be evident when a broader range of interpersonal relationships is considered. For example, in collectivistic cultures, the notion of "good" or "harmonious" interpersonal relationships may be interpreted more broadly than in individualistic cultures and bring to mind extended family members, neighbors, work colleagues, and the members of social and interest groups (e.g., groups of people from the same hometown or who graduated from the same school). Maintaining good relationships with people in this extended interpersonal network may not be a priority for members of individualistic cultures and may have relatively little to do with their self-esteem, but this task could be important for members of collectivistic societies and therefore have a substantial influence on their self-esteem. Thus, it seemed important to reexamine the relations between relationship quality and self-esteem using a measure that is not limited to a few close relationships and asks how much people care about maintaining harmonious interpersonal relationships with others in general.

In summary, we hypothesized that a cross-cultural difference in the association between self-esteem and relationship quality would emerge if we assessed the quality of relationships with a broader range of other people. If our hypothesis is supported, it will imply that relationship quality is more important for predicting life-satisfaction in collectivistic cultures because relationship quality has both direct and indirect influences (mediated through self-esteem) on life satisfaction.

ROLE OF EMOTION IN DETERMINING RELATIONSHIP QUALITY AND SELF-ESTEEM

Another goal of the present study was to explore some of the determinants of self-esteem and relationship quality for understanding culture-specific associations among self-esteem, relationship quality, and life satisfaction. Self-construal (Kwan et al., 1997), the Big Five personality traits (Benet-Martínez & Karakitapoglu-Aygün, 2003; Kwan et al., 1997; Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002), and sympathy (Uchida et al., 2001) have been considered in this regard, and interestingly, all of these variables displayed culture-

invariant patterns in the prediction of self-esteem and relationship quality.

No studies have focused primarily on the role of emotion, although it is considered to be important in maintaining interpersonal relationships (e.g., Buck, 1984; Izard, 1991) and self-esteem (e.g., Brown, 1993). More important, emotion has been shown to have culture-specific functions in social environments (Ekman & Friesen, 1975; Mesquita & Frijda, 1992; Russell, 1995), which may mean that emotion variables function differently in different cultures when they are used to predict relationship quality.

EMOTION AND RELATIONSHIP QUALITY: CULTURE-SPECIFIC PATTERNS

Among the various aspects of emotion, emotional expression has probably been explored most thoroughly as an influence on communication and interpersonal adaptability (Planalp, 1999). Although research on emotional expression has supported the existence of universal basic emotions (e.g., Ekman & Friesen, 1975; but see Russell, 1995), cultural differences in emotional expression also have been observed (e.g., Briggs, 1970; Levy, 1973; Lutz, 1987). One of the common notions about East Asians is that they are less emotionally expressive than Westerners. As the well-known concept of "display rules" (Ekman & Friesen, 1969) suggests, these cultural differences may exist not because East Asians experience less emotion than Westerners but because of inhibitory display rules imposed by their societies (Mesquita & Frijda, 1992). If so, an interesting question is why this cultural practice (inhibition of emotional expression) was introduced into East Asian societies.

A plausible explanation for the cultural difference was provided by Oyserman et al. (2002). They speculated that members of collectivistic societies are socialized to control their emotional expressions so as to maintain ingroup harmony. In contrast, members of individualistic societies are encouraged to express their feelings more directly because they do not expect others to "read their mind" in social interactions (Markus & Kitayama, 1991). One testable hypothesis derived from this speculation is that expressing one's feelings is more important for maintaining good interpersonal relationships in an individualistic culture than in a collectivistic culture. This hypothesis suggests an additional question: What emotion variables might be important for the maintenance of harmonious interpersonal relationships in collectivistic cultures?

A recent study by Kang and Shaver (in press) introduced a new measure of emotional complexity that seems to be important in predicting the maintenance of good interpersonal relationships. The new scale assesses the degree to which a person has (a) a broad range of emotional experiences (hereafter called emotional range) and (b) a propensity to make subtle distinctions within emotion categories (called emotion differentiation). Kang and Shaver argued that emotional complexity, so defined, would increase a person's interpersonal adaptability because behaving appropriately in interpersonal situations often requires understanding other people's feelings (De Rivera, 1984). To understand others' feelings, individuals may benefit from having varied and well-differentiated emotional experiences because understanding others' feelings is based at least in part on understanding one's own feelings (Saarni, 1997). The results of two large-scale studies supported the hypothesis that emotional complexity would be associated with greater interpersonal adaptability (Kang & Shaver, in press).

Kang and Shaver also found that emotion differentiation, not emotional range, was the major contributor to interpersonal adaptability. This finding has been replicated in follow-up studies (Kang, 2003), along with an interesting ethnic difference: Emotion differentiation plays a more important role in predicting the quality of interpersonal relationships (assessed as one aspect of interpersonal adaptability) in Asian American groups than in European American groups. This finding suggests that emotion differentiation may be one of the qualities that help Asians to maintain good interpersonal relationships because it allows members of collectivistic societies to be sensitive to each others' feelings rather than focusing on the expression of their own feelings (Oyserman et al., 2002).

In sum, two emotion variables are expected to predict culture-specific patterns in the determination of relationship quality: Emotional expression may be more important to interpersonal relations in individualistic cultures, whereas emotion differentiation (a determinant of interpersonal sensitivity) may be more important in collectivist societies. These hypotheses were tested in the current study.

EMOTION AND SELF-ESTEEM: CULTURE-GENERAL PATTERNS

Emotion also plays a pivotal role in self-esteem because self-esteem has been defined as a general feeling about oneself (Robins, Tracy, Trzesniewski, Potter, & Gosling, 2001). Close associations between emotion and self-esteem have been illustrated in research on positive affect (PA) and negative affect (NA). A number of studies have demonstrated that PA and NA are closely connected with self-esteem (e.g., Brown & Marshall, 2001; DeNeve & Cooper, 1998; Watson & Clark, 1984), such that high PA individuals tend to feel good about themselves, whereas high NA individuals tend to have a negative self-view.

NA and PA, as well as valence and arousal, are perhaps the fundamental underlying dimensions that can be used to study individual differences in self-reported mood (Feldman, 1995; Feldman Barrett & Russell, 1998; Watson & Tellegen, 1985). When these two dimensions are assessed at the trait level, trait PA and NA are considered to be pervasive predispositions to experience positive or negative emotions (Watson, Clark, & Tellegen, 1988). Although few studies have examined the relations among PA, NA, self-esteem, and culture, Kwan et al. (1997) reported that the Big Five personality traits predicted self-esteem in both the United States and Hong Kong. In other words, the path coefficients from the five personality variables to self-esteem were equivalent across the two cultural groups. Because trait PA and NA correspond roughly to Extraversion and Neuroticism, respectively (Watson et al., 1988), a similar pancultural influence of emotionality on self-esteem could be expected.

One caveat should be considered, however. PA and NA are fairly independent of each other (Watson et al., 1988), whereas Extraversion is substantially (and negatively) related to Neuroticism (John & Srivastava, 1999). Furthermore, several studies have revealed interesting cross-cultural differences in emotionality: North Americans tend to maximize experiencing positive emotions and minimize experiencing negative emotions. This tendency is weaker in Asian societies (Diener et al., 1995; Kityama & Markus, 1999; Kitayama, Markus, & Kurokawa, 2000). One of the goals of the current study was to see whether the links from PA and NA to self-esteem would be similar in the United States, Korea, and China.

OVERVIEW OF THE PRESENT STUDY AND MAJOR HYPOTHESES

Our goals were threefold: First, we wished to evaluate the importance of relationship quality as a determinant of life satisfaction in collectivistic cultures by showing that relationship quality has both a direct and an indirect effect (mediated through self-esteem) on life satisfaction. To accomplish this goal, we proposed a new way to assess relationship quality that is not limited to a few close prelateships. Second, cultural differences in emotional expression and emotion differentiation were explored as possible predictors of relationship quality. Finally, the pancultural influence of emotionality (PA and NA) on self-esteem was examined.

To address these issues, four cultural groups from three nations—Euro-American, Asian American, Korean, and Chinese—participated in the study. We separated Asian Americans from Euro-Americans rather than treating them as a homogeneous group because we wished to compare the Euro-American group with Asian groups differing in degree of acculturation to American society, that is, Asian Americans with Asians residing in Korea and China. The major hypotheses were as follows: (a) The association between self-esteem and relationship quality would be stronger in Korean and Chinese groups than in the Euro-American group; (b) emotional expression would be more important for relationship quality than emotion differentiation in the Euro-American group, whereas emotion differentiation would be more important than emotional expression for the Korean and Chinese groups; and (c) PA and NA would predict self-esteem to the same extent in all of the cultural groups studied. No specific hypotheses were advanced with respect to the Asian American group because of the paucity of relevant research, although a recent study (Benet-Martínez & Karakitapoglu-Aygün, 2003) found no ethnic differences between Euro-American and Asian American groups in the prediction of life satisfaction.

METHOD

Participants and Procedure

Participants included 170 Euro-American students (129 women) and 149 Asian American students (114 women) at the University of California, Davis, who received extra credit. A packet of questionnaires was completed in small group sessions. In addition, 179 students (100 women) at Seoul National University and Joong-Moon Medical School in Korea and 141 students (71 women) at Sun Yet-Sen University in China filled out a questionnaire packet either in class or as a take-home assignment. All participants ranged in age from 17 to 43, with a mean of 20.33 years ($SD = 2.50$), and there were no significant differences in age across the four groups.

Asian American students consisted of 77 Chinese, 24 Vietnamese, 23 Filipinos, 8 Hmongs, 8 Koreans, 6 Japanese, and 3 with mixed Asian background. Although 69 Asian Americans (46%) were not born in the United States, 52% of them came to live in the United States at or before age 8 ($M = 8.16$, $SD = 5.11$). Seventy-seven percent of Asian American students reported that they were raised only or mainly in the United States. This profile of the Asian American group suggested that they were more closely identified with American culture than with their Asian cultural background.

Materials

Life satisfaction. This was measured by the Satisfaction With Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985), which contains five items that are rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Sample items are "I am satisfied with my life" and "In most ways, my life is close to my ideal."

Self-esteem. The Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1965) is a 10-item measure based on a 7-point rating scale. It is a measure of global self-esteem, and half of the items are reverse-keyed. Sample items are "On the whole, I am satisfied with myself" and "I certainly feel useless at times" (reversed).

Relationship quality. The six-item Interpersonal Relationship Quality scale (IRQ) (Kang & Shaver, in press) was used to assess quality of interpersonal relationships. Rather than assessing the satisfaction with specific relationships, the focus of this questionnaire is on maintaining good interpersonal relationships with others in general. The items of this scale were developed to describe possible characteristics of people who maintain warm and comfortable relationships with others (see Appendix A): They tend to keep in touch with old friends and neighbors ("I enjoy visiting old friends and neighbors in my hometown"), tend to be sensitive to others' needs around them ("I am highly receptive to the needs of those around me"), often hear compliments from their friends and family ("My friends would describe me as kind and affectionate" and "Family members often say that I am good-natured and have a heart for helping others"), feel good about their relationships with others in general ("I feel that my relationships with others are friendly and comforting"), and tend to have a broad social network ("I am like a spider web, with connections to may different people"). The internal consistency reliability reported in Kang and Shaver (in press) was .80 (N = 100) and the test-retest reliability throughout a 6-week interval was .78 (N = 93). Kang and Shaver (in press) also validated this scale by obtaining peer ratings. A copy of the IRQ, altered so that it could be used to describe another person, was mailed to peers named by 94 participants. The total number of peers responding was 347 (the number per subject ranged from 2 to 5, with M = 3.69, SD = .98). The self-peer agreement coefficient was quite high (r = .56), implying that individuals who score high on the scale are perceived by others as people who maintain good interpersonal relationships (refer to the Method section of Study 2 in Kang & Shaver, in press, for more details).

Emotional expression. This was assessed by the 16-item Emotional Expressiveness Questionnaire (EEQ) (King & Emmons, 1990), which measures self-reported emotional expressiveness on a 7-point scale ranging from 1 (*not at all characteristic*) to 7 (*extremely characteristic*). Sample items are "When I am angry, people around me usually know" and "I laugh a lot."

Emotion differentiation. The seven-item Emotion Differentiation Scale (EDS) was selected to assess emotion differentiation. This is one of the subscales of the Range and Differentiation of Emotional Experience Scale (Kang & Shaver, in press), which was developed to tap individual differences in having varied and well-differentiated emotional experiences. Items of the EDS are rated on a 7-point scale ranging from 1 (*does not describe me at all*) to 7 (*describes me extremely well*). This scale is displayed in Appendix B. Kang and Shaver (in press) reported that the internal consistency of the EDS was .79 with a 5-point rating scale (N = 629) and .83 with a 7-point rating scale (N = 100). Its test-retest reliability was .71 throughout a 6-week interval (N = 93).

PA and NA. The Positive Affect and Negative Affect Schedule (PANAS) (Watson et al., 1988) was selected to measure trait PA and NA. Ten positive adjectives (e.g., *excited*) and 10 negative adjectives (e.g., *distressed*) were rated on a 5-point scale to indicate the extent to which participants feel this way in general.

Internal consistencies of these scales can be found in Table 1 for each of the four cultural groups. All questionnaires were originally developed in English and translated into Korean and Chinese by native speakers of each language. To ensure equivalence between the original scales and the translated ones, bilingual undergraduate and graduate students back-translated the Korean and Chinese scales into English and thoroughly checked any discrepancies between the original and the translated versions of the scales.

Overview of the Data Analyses

Figure 1 displays the model we tested in this study, according to which self-esteem is predicted by NA and PA and relationship quality is predicted by emotional expression and emotion differentiation. A path also was specified from relationship quality to self-esteem, and this path was expected to be stronger for Asian than for Euro-American participants. Both self-esteem and relationship quality were expected to predict life satisfaction. Multigroup analyses within a structural equation model were used to test this model.

To prepare the data for the multigroup analyses, each scale was factor-analyzed to check its unidimensionality. Any item that loaded negatively on the first unrotated factor was eliminated at this stage. One item from the Rosenberg Self-Esteem Scale and four items from the Emotional Expressiveness Questionnaire were discarded from further analyses for this reason.[1] Except for these items, all items from all of the scales worked equally well in all four cultural groups.

After removing the five items that did not work cross-culturally, another set of factor analyses was conducted using a principal-axis method and specifying a single-factor solution. The factor loadings from these analyses were used to parcel items on each scale into three groups so that each latent variable had three indicators. The items were aggregated into three groups such that the

TABLE 1: Means and Standard Deviations of Variables, Along With Scale Properties

	LS	*SE*	*RQ*	*PA*	*NA*	*EE*	*ED*
Euro-American							
M	5.12_a	5.77_a	4.01_a	3.60_a	2.10_a	4.89_a	4.56_a
SD	(1.18)	(.94)	(.70)	(.58)	(.60)	(.91)	(1.06)
Asian American							
M	4.21_b	5.09_b	3.70_b	3.34_b	2.36_b	4.46_b	4.14_b
SD	(1.34)	(1.18)	(.72)	(.57)	(.71)	(.88)	(.99)
Korean							
M	3.58_c	5.01_b	3.03_c	2.98_c	2.52_c	4.07_c	3.68_c
SD	(1.18)	(1.10)	(.68)	(.55)	(.64)	(.86)	(1.18)
Chinese							
M	3.38_c	4.93_b	3.31_d	3.07_c	2.54_c	3.95_c	3.78_c
SD	(1.17)	(1.13)	(.86)	(.60)	(.66)	(.97)	(1.32)
Number of items	5	9[a]	6	10	10	12[a]	7
Euro-American α	.88	.88	.82	.82	.83	.83	.86
Asian American α	.92	.91	.81	.83	.87	.78	.82
Korean α	.89	.92	.72	.79	.83	.80	.92
Chinese α	.85	.89	.75	.80	.84	.82	.91

NOTE: N = 164 (Euro-American), 148 (Asian American), 175 (Korean), and 139 (Chinese). Means within columns that do not share a common subscript differ at $p < .05$. LS = life satisfaction, SE = self-esteem, RQ = relationship quality, PA = positive affect, NA = negative affect, EE = Emotional Expressiveness Questionnaire, ED = emotion differentiation.

a. One item from the Rosenberg Self-esteem Scale and four items from the Emotional Expressiveness Questionnaire were eliminated due to their negative loadings on the first unrotated factor (see Note 1 for more details).

resulting parcels had, on average, equivalent factor loadings, following Kwan et al.'s (1997) practice. This parceling process was undertaken because individual items on a questionnaire often have less than adequate reliability and low communality (Kishton & Widaman, 1994).

The model displayed in Figure 1 was first tested without imposing factor invariance. It was then tested again with factor invariance (identical factor loadings for all cultural groups for each of the latent variables). If there was no significant increase in the value of χ^2 when factor invariance was imposed, we considered the assumption of factor invariance to have been met. Only then were the path coefficients among latent constructs across the four cultural groups compared and the meaning of the differences interpreted. These multigroup analyses provide a more powerful tool for testing cross-cultural differences than do three separate studies (such that the European American group was paired with the Asian American, Korean, and Chinese groups, respectively) by imposing factor invariance across the four groups simultaneously (Dunn, Everitt, & Pickles, 1993).

RESULTS

Means and Zero-Order Correlations

Table 1 shows the means and standard deviations for all of the scales used in the study, along with scale properties.[2] The Euro-American students had the highest mean on six of the seven measures (life satisfaction, self-esteem, relationship quality, PA, emotional expression, and emotion differentiation) and the lowest mean on the trait NA scale. The Asian American group generally placed between the Euro-American group and both of the Asian groups in terms of their mean scores, but of interest, the Asian American group did not have higher self-esteem than the Korean and Chinese groups. Korean and Chinese participants had the lowest means on all scales except the NA scale.

The means on the trait PA and NA scales for the four cultural groups supported previous findings (Diener et al., 1995; Kitayama et al., 2000). Euro-American students tended to maximize their positive feelings and minimize negative feelings (3.60 vs. 2.10), but this tendency was not as evident among Asian participants (for Koreans, 2.98 vs. 2.52; for the Chinese, 3.07 vs. 2.54). Interestingly, on this dimension, Asian American participants displayed a response pattern similar to that of Euro-American participants (3.34 vs. 2.36), supporting our speculation that the Asian American participants in this study seemed to be highly acculturated to America. Recall that 77% of the Asian Americans in this study were either born in the United States or came to live in the United States at or before age 8. Recent immigrants from Asian countries might display a different pattern of means.

Intercorrelations among the variables are displayed for each cultural group in Table 2. As expected, the correlations between PA and NA were not high, ranging from –.20 (Euro-American group) to .03 (Korean group). Of interest, the Chinese group had a slight positive correlation (.12). Similar results regarding positive and negative affects were recently reported by Bagozzi, Wong, and Yi (1999), who compared participants from the United States, China, and Korea. Scores on the Emotional Expressiveness Questionnaire and the Emotion Differentiation Scale were not highly correlated with each other (r = .26, .26, .25, and .13 for Euro-Americans, Asian Americans, Koreans, and Chinese, respectively), implying that emotional expressiveness and emotion differentiation are distinct concepts. Internal consistencies of the scales are presented in Table 1. Reliabilities were acceptable, ranging from .72 to .92.

Testing the Model

Multigroup analyses were conducted using the LISREL 8.3 program (Jöreskog & Sörbom, 1999). Before the proposed model was tested, a measurement

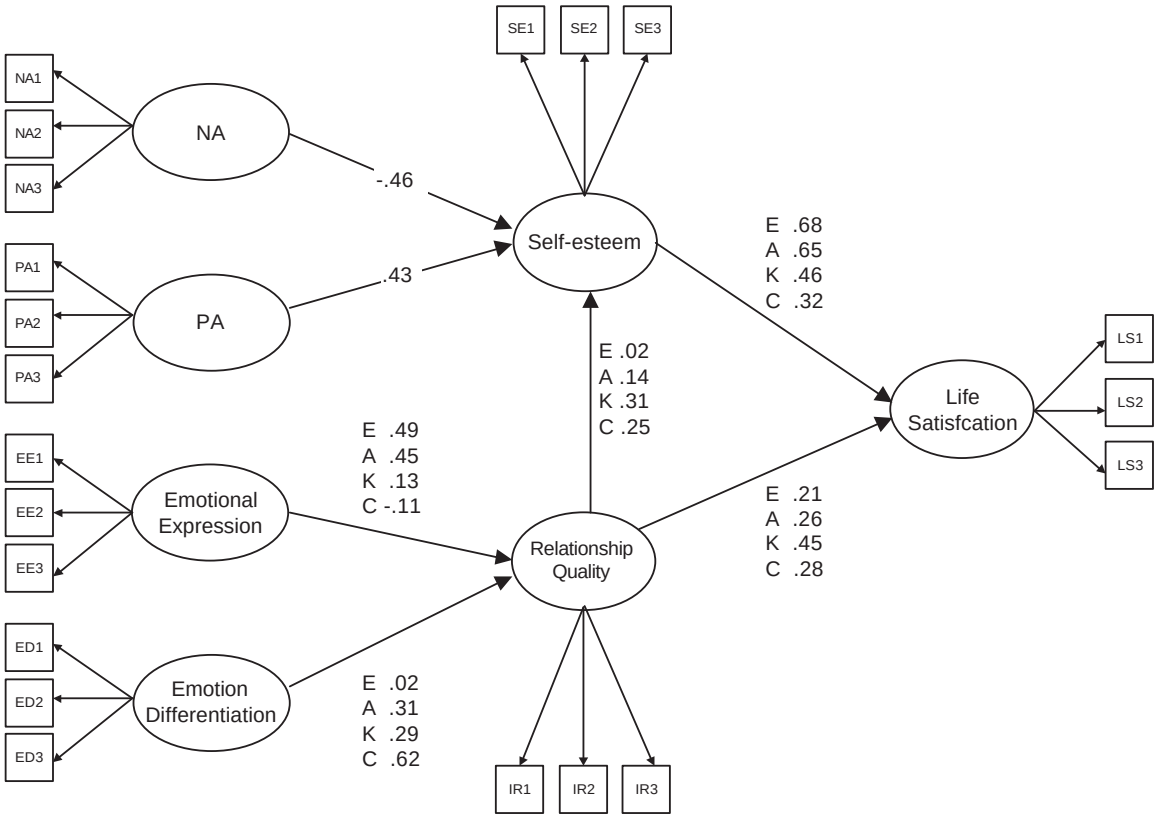

Figure 1 **Culture-specific and culture-general patterns of psychological processes in life satisfaction. N = 164 for the Euro-American sample, N = 148 for the Asian American sample, N= 175 for the Korean sample, and N = 139 for the Chinese sample. Standardized path coefficients are shown. E = Euro-American, A = Asian American, K = Korean, and C = Chinese. Coefficients less than .20 were not significant at the p < .05 level. Factor loadings and measurement errors are omitted for clarity.**

model of the seven latent variables was checked across the four cultural groups. All factor loadings of latent variables were statistically significant at $p < .05$, and the measurement model yielded an acceptable level of fit to the four groups, $\chi^2(672, N = 639) = 1097.85$, root mean square error of approximation (RMSEA) = .06, Non-Normed Fit Index (NNFI) = .93, Comparative Fit Index (CFI) = .94.

Next, we tested the factor invariance of the proposed model, as shown in Figure 1. All factor loadings of latent variables and all path coefficients were freely estimated at the beginning and then the factor loadings were constrained to be equal across all four groups to test factor invariance. The chi-square test between the two structural equation models (before and after imposing factor invariance) suggested no substantial loss in model fit, $\Delta\chi^2 = 51.10, \Delta df = 54, p = .59$. Three overall fit indices indicated that the assumption of factor invariance was acceptable, RMSEA = .06, NNFI = .92, and CFI = .93, although the chi-square value was significant, given the large N, $\chi^2(758, N = 639) = 1266.91$, $p < .01$. This model served as the baseline model for testing hypotheses.

A set of nested structural equation models was constructed to test our hypotheses. The first hypothesis—that relationship quality would boost self-esteem in collectivistic societies—was tested by comparing the baseline model with a model that did not have a path from relationship quality to self-esteem. The chi-square test supported our hypothesis, suggesting that this path was necessary, $\Delta\chi^2 = 20.16$, $\Delta df = 4$, $p < .01$. When we imposed equality constraints on the path coefficients across the four groups, the acceptability of the constraint was not supported, $\Delta\chi^2 = 9.05, \Delta df = 3, p < .05$, suggesting that the path coefficients were significantly different from each other. Maintaining good interpersonal relationships seems to cause Korean ($\beta = .31$) and Chinese ($\beta = .25$) participants to feel better about themselves, but this is not the case for Euro-Americans ($\beta = .02$). The path coefficient for the Asian American group was small but statistically significant ($\beta = .14$).

The results of this study also replicated the previous findings with respect to the relative importance of self-esteem and relationship quality in determining life satisfaction. Self-esteem appears to be more important than

TABLE 2: Correlations Among Variables in the Four Cultural Groups

	1	*2*	*3*	*4*	*5*	*6*
Euro-American (*N* = 164)						
1. Life satisfaction	—					
2. Self-esteem	.64	—				
3. Relationship quality	.30	.21	—			
4. Positive affect	.47	.50	.38	—		
5. Negative affect	–.44	–.53	–.08	–.20	—	
6. Emotional expression	.32	.16	.39	.26	.05	—
7. Emotion differentiation	.15	.16	.22	.21	–.05	.26
Asian American (*N* = 148)						
1. Life satisfaction	—					
2. Self-esteem	.71	—				
3. Relationship quality	.39	.33	—			
4. Positive affect	.47	.55	.32	—		
5. Negative affect	–.50	–.60	–.24	–.12	—	
6. Emotional expression	.53	.43	.45	.45	–.17	—
7. Emotion differentiation	.25	.27	.25	.35	–.09	.26
Korean (*N* = 175)						
1. Life satisfaction	—					
2. Self-esteem	.58	—				
3. Relationship quality	.51	.39	—			
4. Positive affect	.35	.39	.38	—		
5. Negative affect	–.27	–.41	–.11	.03	—	
6. Emotional expression	.13	.17	.18	.29	.05	—
7. Emotion differentiation	.28	.23	.31	.32	.05	.25
Chinese (*N* = 139)						
1. Life satisfaction	—					
2. Self-esteem	.43	—				
3. Relationship quality	.39	.40	—			
4. Positive affect	.15	.39	.43	—		
5. Negative affect	–.25	–.31	–.07	.12	—	
6. Emotional expression	.09	.11	–.01	.24	.09	—
7. Emotion differentiation	.24	.25	.51	.36	.14	.13

NOTE: Correlation coefficients with an absolute value greater than .16 are significant at the .05 level according to a two-tailed test.

maintaining good interpersonal relationships to life satisfaction for Euro-Americans (βs = .68 vs. .21), but the two variables contribute about equally to life satisfaction for Koreans (βs = .46 vs. .45) and Chinese (βs = .32 vs. .28). The pattern for Asian Americans is more similar to the pattern for Euro-Americans than to the pattern for Asians. Self-esteem was more important than interpersonal relationships for their life satisfaction (βs = .65 vs. .26).

To test the second hypothesis—that there would be cultural differences in emotional expression and emotion differentiation—equality constraints were imposed on the path coefficients from emotional expression to relationship quality and from emotion differentiation to relationship quality. The chi-square tests supported our hypothesis, showing that imposing the equality constraints was not acceptable, $\Delta\chi^2 = 24.54$, $\Delta df = 3$, $p < .01$, for emotional expression and $\Delta\chi^2 = 26.68$, $\Delta df = 3$, $p < .01$, for emotion differentiation.

As hypothesized, the two emotion variables performed differently as predictors of relationship quality in the different cultural groups. For Euro-American participants, emotional expression played a significant role in the management of interpersonal relationships, whereas emotion differentiation did not (βs = .49 and .02, respectively). However, this pattern was reversed for Asian participants (βs = .13 and .29 for Koreans, –.11 and .62 for Chinese), suggesting that emotion differentiation was more important than emotional expression in maintaining good interpersonal relationships in Korea and, especially, in China.[3]

Interestingly, for Asian Americans, both emotional expressiveness and emotion differentiation were important for good interpersonal relationships (β = .45 and .31, respectively). Although the Asian American group did not differ much from the Euro-American group in other psychological processes in this model, they were

different from the Euro-American group in benefiting interpersonally from higher emotion differentiation scores.

Finally, we tested the culture-general pattern of emotionality (PA and NA) by imposing equality constraints on the path coefficients from emotionality variables to self-esteem across the four groups. The results of the chi-square comparison test with the baseline model supported our prediction that there would be a culture-general pattern, $\Delta\chi^2 = .11$, $\Delta df = 6$, $p = .99$. NA and PA were equally strong predictors of self-esteem across the four cultural groups (βs = –.46 and .43 for NA and PA). Three overall fit indices indicated that the final model was acceptable, $\chi^2(764, N = 639) = 1267.02$, $p < .01$, RMSEA = .06, NNFI = .93, and CFI = .93. The standardized path coefficients for the final model across the four cultural groups are presented in Figure 1.

Considerable portions of the variance in self-esteem (R^2 = .67, .49, .44, and .35 for Euro-Americans, Asian Americans, Koreans, and Chinese, respectively) and life satisfaction (R^2 = .51, .40, .61, and .32) were explained by the model. To a lesser degree, the model also accounted for a significant portion of the variance in the quality of interpersonal relationships (R^2 = .28, .38, .33, and .16).

DISCUSSION

The aim of the present research was to explore culture-specific psychological processes involved in the prediction of life satisfaction. We found that relationship quality was associated with both self-esteem and life satisfaction among students in collectivist cultures, but it contributed only to life satisfaction, not self-esteem, among students in individualist cultures. Furthermore, two emotion variables were proposed as possible predictors of relationship quality. As hypothesized, emotional expression proved relevant for managing good interpersonal relationships among Euro-Americans, whereas emotion differentiation was relevant for good interpersonal relationships among Asians. The Asian American group appeared to benefit from both expressiveness and differentiation. The pancultural influence of emotionality on self-esteem also was demonstrated, suggesting that feeling good about oneself is determined to some extent by biologically rooted temperament (Schimmack et al., 2002).

Culture-Specific Associations Among Emotion, Relationship Quality, and Self-Esteem

The current study clearly reveals the importance of maintaining good interpersonal relationships among members of collectivist cultures by showing that relationship quality has both a direct and an indirect effect (mediated through self-esteem) on life satisfaction. When we asked participants to evaluate their interpersonal relationships in general rather than a few close relationships, maintaining good interpersonal relationships appear to cause people in collectivist cultures to feel good not only about their lives but also about themselves. Although the importance of maintaining good interpersonal relationships in collectivistic cultures has been underscored by a number of theorists (Markus & Kitayama, 1991; Triandis, 1989), few studies have demonstrated this importance empirically.

Another unique contribution of our study is the identification of two emotion variables that work in culture-specific ways to predict the quality of interpersonal relationships. As expected, emotional expression was more important for Americans in maintaining good interpersonal relationships, whereas emotion differentiation was more important for Asians. An unexpected finding was that both expression and differentiation contributed to good interpersonal relationships among Asian Americans. This unique pattern of emotion-related determinants of relationship quality occurred despite many other similarities between Euro-Americans and Asian Americans.

Limitations and Implications for Future Studies

The findings from this study should be considered in relation to potential limitations. First, the sample size was modest for the model we tested. This limitation interfered with testing the effect of gender differences in the hypothesized culture-specific patterns using a structural equation model. Gender composition varied across the two cultures, with more women than men participating in the Euro-American and Asian American groups. The study should be repeated with larger and more gender-balanced samples.

Another concern is generalizability of the findings. So far, Kwan et al. (1997), Uchida et al. (2001), and we have examined the relative importance of self-esteem and relationship quality as determinants of life satisfaction only within East Asian countries including Hong Kong, Japan, the Philippines, Korea, and China. Whether similar cross-cultural patterns would be found in other collectivistic societies in South America or Africa is an empirical question. The same generalizability question could be asked about the culture-specific patterns involving emotion and relationship quality. Unlike East Asians, South Americans are known for their emotional expressivity, although they live in collectivistic societies. It would be interesting to investigate whether both emotional expression and emotion differentiation are necessary for maintaining good interpersonal relationships in Latin American societies.

The current study did not include personality variables as predictors of relationship quality. The variance in relationship quality explained by the two emotion

variables was not large across the four cultural groups (R^2 = .28, .38, .33, and .16 for Euro-American, Asian American, Korean, and Chinese groups), implying that a considerable portion of the variance remains unexplained. Kwan et al. (1997) and Uchida et al. (2001) examined several personality variables as determinants of relationship harmony or perceived social support (interdependent self-construal, Big Five personality factors, sympathy) and found pancultural relations between personality variables and interpersonal relationship variables. Although emotional expression is strongly associated with Extraversion and emotion differentiation is closely associated with Openness to Experience among the Big Five personality factors (Kang & Shaver, in press), it would be interesting to include other personality variables such as Agreeableness in future studies. This would allow researchers to examine both culture-general and culture-specific patterns simultaneously.

Among the four cultural groups that participated in our study, special attention should be given to the Chinese group. The proportion of variance in life satisfaction explained by self-esteem and relationship quality in this group was somewhat lower than in the other groups (R^2 = .32, compared to .51, .40, and .61 for Euro-Americans, Asian Americans, and Koreans, respectively). This result implies that self-esteem and relationship quality might be less important for life satisfaction in China than in the United States and Korea, which may be reasonable when viewed from an emic perspective on cross-cultural differences (Brislin, Lonner, & Thorndike, 1973). This perspective raises the possibility that self-esteem and relationship quality might need to be assessed in another way in China due to some unknown cultural specificity. However, this result also might be caused by some unique characteristic of the sample recruited for our study. The Chinese participants resided in Guangzhou, China, which is located near Hong Kong and undergoing rapid economic development because of its geographic location. We are not sure how representative this group is of China in general, so it will be important to replicate the findings with samples from different parts of China.

Our study contributes to understanding Asian Americans by providing new information regarding the interrelations among emotion, relationship quality, self-esteem, and life satisfaction for this group. The Asian Americans who participated in our study appeared to be similar to Euro-Americans in several ways: Self-esteem was a more important determinant of life satisfaction than relationship quality, and relationship quality predicted self-esteem only weakly. However, Asian Americans were clearly different from Euro-Americans in the ways in which the two emotion variables predicted relationship quality. Both expression and differentiation contributed to good interpersonal relationships among Asian Americans. Whether the unique pattern of emotion-related determinants of relationship quality for Asian Americans is due simply to being only partly acculturated to Euro-American society or to interacting with both Euro-American and Asian social networks is an interesting topic for future research. Research could be designed to compare Asian American groups that differ in their acculturation level or groups that differ in terms of the composition of their social networks.

Closing Remarks

The studies reported here demonstrate the relative importance for individuals in collectivist cultures of maintaining good interpersonal relationships. These relationships appear to lead such individuals not only to feel good about their lives but also to feel better about themselves. In achieving good interpersonal relationships, or harmony, being emotionally expressive may not be important in collectivist societies. What seems to matter instead is emotion differentiation, which seems to help people be sensitive to each other's feelings. In contrast, in individualist societies, what seems to matter is being able to express one's own feelings. Asian Americans benefit from both expression and differentiation. One practical implication of our research is that Asian immigrants may benefit from encouragement and training to express their feelings more freely than is usual in their own culture. This may accelerate their acclimation to an individualistic society. Another implication is that Euro-Americans who wish to interact extensively with members of Asian cultures would benefit from encouragement and training in differentiating between finely nuanced feelings and muted emotional expressions.

APPENDIX A
Interpersonal Relationship Quality

Using the 7-point scale provided below, please indicate the extent to which you believe that the statement describes you, placing the appropriate number on the line preceding that item. Please be open and honest in responding.

This statement describes me . . .

1	2	3	4	5	6	7
not at all	slightly	somewhat	moderately	pretty well	very well	extremely well

___1. I enjoy visiting old friends and neighbors in my hometown.

___2. My friends would describe me as kind and affectionate.

___3. Family members often say that I am good-natured and have a heart for helping people.

___4. I am highly receptive to the needs of those around me.

___5. I feel that my relationships with others are friendly and comforting.

___6. I am like a spider web, with connections to many different people.

APPENDIX B
Emotion Differentiation Scale

Using the 7-point scale provided below, please indicate the extent to which you believe that the statement describes you, placing the appropriate number on the line preceding that item. Please be open and honest in responding.

This statement describes me . . .

1	2	3	4	5	6	7
not at all	slightly	somewhat	moderately	pretty well	very well	extremely well

___1. I tend to draw fine distinctions between similar feelings (e.g., depressed and blue, annoyed and irritated).

___2. I am aware that each emotion has a completely different meaning.

___3. I think that each emotion has a very distinct and unique meaning to me.

___4. I am aware of the different nuances or subtleties of a given emotion (e.g., depressed and blue, annoyed and irritated).

___5. I am good at distinguishing subtle differences in the meaning of closely related emotion words.

___6. If emotions are viewed as colors, I can notice even small variations within one kind of color (emotion).

___7. I am aware of the subtleties between feelings I have.

NOTES

1. One item dropped from the Rosenberg Self-Esteem Scale is "I wish I could have more respect for myself" (No. 8), which loaded negatively on the unrated first factor in both the Korean and the Chinese groups. This item also was dropped from the Kwan et al. (1997) study due to the same reason. Four items were discarded from the Emotional Expressiveness Questionnaire because at least one of them loaded negatively on the first factor: "I apologize when I have done something wrong" (No. 14) for the Euro-American group, "I always express disappointment when things don't go as I'd like them to" (No. 16) for the Asian American group, "Whenever people do nice things for me, I feel 'put on the spot' and have trouble expressing my gratitude" (No. 8), and "If a friend surprised me with a gift, I wouldn't know how to react" (No. 13) for the Korean and the Chinese groups.

2. Gender differences in the mean scores were examined by the four cultural groups. No gender differences were found among the Korean and the Chinese groups. In the Asian American group, men had a significantly higher mean score than women on the PA scale (3.57 vs. 3.27). Euro-American women tended to have higher mean scores on the Emotional Expressiveness Questionnaire (4.96 vs. 4.53) and on the Interpersonal Relationship Quality Scale (4.12 vs. 3.61). Because of the modest size of sample in each cultural group, separate multigroup analyses by gender were not attempted.

3. One thing that should be addressed here is that the multigroup analyses intend to test to what extent the covariance or correlation matrices from different groups have the same structure in a latent model. Although the European American group had higher mean scores on both the Emotional Expressiveness Questionnaire and the Emotion Differentiation Scale than did the Korean and Chinese groups, mean differences are not relevant to testing the similarity of the latent structure (Dunn, Everitt, & Pickes, 1993).

REFERENCES

Aron, A., & Aron, E. (1996). Self and self-expansion in relationships. In G. J. O. Fletcher & J. Fitness (Eds.), *Knowledge structures in close relationships: A social psychological perspective* (pp. 325-344). Mahwah, NJ: Lawrence Erlbaum.

Bagozzi, R. P., Wong, N., & Yi, Y. (1999). The role of culture and gender in the relationship between positive and negative affect. *Cognitive and Emotion, 13*, 641-672.

Bandura, A. (1982). Self-efficacy: Mechanism in human agency. *American Psychologists, 37*, 122-147.

Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1985). *Habits of the heart: Individualism and commitment in American Life.* Berkeley: University of California Press.

Benet-Martínez, V., & Karakitapoglu-Aygün, Z. (2003). The interplay of cultural syndromes and personality in predicting life satisfaction: Comparing Asian Americans and European Americans. *Journal of Cross-Cultural Psychology, 34*, 38-60.

Briggs, J. L. (1970). *Never in anger: Portrait of an Eskimo family.* Cambridge, MA: Harvard University Press.

Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). *Cross-cultural research methods.* New York: John Wiley.

Brown, J. D. (1993). Self-esteem and self-evaluation: Feeling is believing. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 4, pp. 27-58). Hillsdale, NJ: Lawrence Erlbaum.

Brown, J. D., & Marshall, M. A. (2001). Self-esteem and emotion: Some thoughts about feelings. *Personality and Social Psychology Bulletin, 27*, 575-584.

Buck, R. (1984). *The communication of emotion.* New York: Guilford.

DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin, 124*, 197-229.

De Rivera, J. (1984). Development and the full range of emotional experience. In C. Z. Malatesta & C. E. Izard (Eds.), *Emotion in adult development* (pp. 45-64). Beverly Hills, CA: Sage.

Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology, 69*, 851-864.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*, 71-75.
Diener, E., & Lucas, R. E. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of Happiness Studies, 1*, 41-78.
Diener, E., & Suh, E. M. (1999). National differences in subjective well-being. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 213-229). New York: Russell Sage.
Diener, E., Suh, E., Smith, H., & Shao, L. (1995). National differences in reported subjective well-being: Why do they occur? *Social Indicator Research, 34*, 7-32.
Dunn, G., Everitt, B., & Pickles, A. (1993). *Modeling covariances and latent variables using EQS*. New York: Chapman & Hall.
Ekman, P., & Friesen, W. V. (1969). The repertoire of nonverbal behavior: Categories, origins, usage, and coding. *Semiotica, 1*, 49-98.
Ekman, P., & Friesen, W. V. (1975). *Unmasking the face: A guide to recognizing emotions from facial cues*. Englewood Cliffs, NJ: Prentice Hall.
Endo, Y., Heine, S. J., & Lehman, D. R. (2000). Culture and positive illusions in close relationships: How my relationships are better than yours. *Personality and Social Psychology Bulletin, 26*, 1571-1586.
Feldman, L. A. (1995). Valence focus and arousal focus: Individual differences in the structure of affective experience. *Journal of Personality and Social Psychology, 69*, 153-166.
Feldman Barrett, L., & Russell, J. A. (1998). Independence and bipolarity in the structure of current affect. *Journal of Personality and Social Psychology, 74*, 967-984.
Izard, C. E. (1991). *The psychology of emotions*. New York: Plenum.
John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality* (pp. 102-138). New York: Guilford.
Jöreskog, K. G., & Sörbom, D. (1999). *LISREL 8.3: Structural equation modeling*. Chicago: Scientific Software International.
Kagitcibasi, C. (1995). Is psychology relevant to global human development issues? *American Psychologists, 50*, 293-300.
Kang, S. (2003). [Correlates of emotional complexity]. Unpublished raw data, University of Notre Dame.
Kang, S., & Shaver, P. R. (in press). Individual differences in emotional complexity: Their psychological implications. *Journal of Personality*.
King, L. A., & Emmons, R. A. (1990). Conflict over emotional expression: Psychological and physical correlates. *Journal of Personality and Social Psychology, 58*, 864-877.
Kishton, J., & Widaman, K. (1994). Unidimensional versus domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement, 54*, 757-765.
Kitayama, S., & Markus, H. R. (1999). Yin and yang of the Japanese self: The cultural psychology of personality coherence. In D. Cervone & Y. Shoda (Eds.), *The coherence of personality: Social cognitive bases of personality consistency, variability, and organization* (pp. 242-302). New York: Guilford.
Kitayama, S., Markus, H. R., & Kurokawa, M. (2000). Culture, emotion, and well-being: Good feelings in Japan and the United States. *Cognition and Emotion, 14*, 93-124.
Kwan, V. S. Y., Bond, M. H., & Singelis, T. M. (1997). Pancultural explanations for life satisfaction: Adding relationship harmony to self-esteem. *Journal of Personality and Social Psychology, 73*, 1038-1051.
Leary, M. R. (2002). When selves collide: The nature of the self and the dynamics of interpersonal relationships. In A. Tesser, D. A. Stapel, & J. V. Wood (Eds.), *Self and motivation* (pp. 119-146). Washington, DC: American Psychological Association.
Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1-62). San Diego, CA: Academic Press.
Leary, M. R., & Downs, D. L. (1995). Interpersonal functions of the self-esteem motive: The self-esteem system as a sociometer. In M. H. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 123-144). New York: Plenum.
Levy, R. I. (1973). *Tahitians: Mind and experiences in the Society Islands*. Chicago: University of Chicago Press.
Lutz, C. (1987). Goals, events and understanding in Ifaluk emotion theory. In N. Guinne & D. Hoalland (Eds.), *Cultural models in language and thought* (pp. 290-312). Cambridge, UK: Cambridge University Press.
Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224-253.
Mesquita, B., & Frijda, N. H. (1992). Cultural variations in emotion: A review. *Psychological Bulletin, 112*, 197-204.
Michalos, A. C. (1991). *Global report of student well-being*. New York: Springer.
Myers, D. G., & Diener, E. (1995). Who is happy? *Psychological Science, 6*, 10-19.
Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analysis. *Psychological Bulletin, 128*, 3-72.
Planalp, S. (1999). *Communicating emotion: Social, moral, and cultural processes*. Cambridge, UK: Cambridge University Press.
Robins, R. W., Tracy, J. L., Trzesniewski, K., Potter, J., & Gosling, S. D. (2001). Personality correlates of self-esteem. *Journal of Research in Personality, 35*, 463-482.
Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
Russell, J. A. (1995). Facial expressions of emotion: What lies beyond minimal universality? *Psychological Bulletin, 118*, 379-391.
Saarni, C. (1997). Emotional competence and self-regulation in childhood. In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 35-66). New York: Basic Books.
Schimmack, U., Radhakrishnan, P., Oishi, S., Dzokoto, V., & Ahadi, S. (2002). Culture, personality, and subjective well-being: Integrating process models of life satisfaction. *Journal of Personality and Social Psychology, 82*, 582-593.
Triandis, H. C. (1989). The self and behavior in different cultural contexts. *Psychological Review, 96*, 506-520.
Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.
Uchida, Y., Kitayama, S., Mesquita, B., & Reyes, J. (2001, June). *Interpersonal sources of happiness: The relative significance in the U.S., the Philippines, and Japan*. Paper presented at a meeting of the American Psychological Society, Toronto, Ontario, Canada.
Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin, 96*, 463-490.
Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.
Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin, 98*, 219-235.

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