

# The Shifting Basis of Life Satisfaction Judgments Across Cultures: Emotions Versus Norms

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The relative importance of emotions versus normative beliefs for life satisfaction judgments was compared among individualist and collectivist nations in 2 large sets of international data (in total, 61 nations,  $N = 62,446$ ). Among nations, emotions and life satisfaction correlated significantly more strongly in more individualistic nations ( $r = .52$  in Study 1;  $r = .48$  in Study 2). At the individual level, emotions were far superior predictors of life satisfaction to norms (social approval of life satisfaction) in individualist cultures, whereas norms and emotions were equally strong predictors of life satisfaction in collectivist cultures. The present findings have implications for future studies on cultural notions of well-being, the functional value of emotional experiences, and individual differences in life satisfaction profiles.

Across the world, is the “good life” attained mostly by doing what a person would like to do or by doing what a person thinks he or she should do? More broadly, are internal processes, such as attitudes, beliefs, emotions, and the like, or external pro-

cesses, such as behaving according to the norms, roles, and others’ expectations, the important factors in well-being?

Research reviewed by Fiske, Kitayama, Markus, and Nisbett (in press) suggests that Western individuals see behavior primarily as a function of personal attributes and dispositions, such as emotions, whereas East Asian individuals see situational factors, such as norms, roles, and obligations, as the major determinants of behavior. Triandis (1995) argued that the defining attributes of individualist Western samples include emphasis on hedonism, and the collectivist samples include emphasis on behavior consistent with norms, role, and obligations. In fact, Triandis (1995) argued that collectivists “are often socialized to enjoy doing their duty” (p. 11).

Such contrasting cultural perspectives, regarding the fundamental determinants of behavior, have significant implication for defining the “good life” across cultures. Above all, they raise the possibility that judgments of life satisfaction may be grounded primarily on intrapsychic experiences in some cultures, whereas they may be based more on social elements in others. More specifically, in cultures where one’s internal attributes are emphasized over the evaluations and expectations of others, emotional experiences may correlate more strongly with life satisfaction than in other cultures. Conversely, in cultures where a significant part of one’s identity consists of collective elements, social factors (e.g., the normative value of life satisfaction) may heavily affect one’s appraisal of a good life. Several contrasting features of the self-system between individualist and collectivist cultures (Hofstede, 1980; Kim, Triandis, Kagitçibasi, Choi, & Yoon, 1994; Triandis, 1995) further implicate these possibilities.

## The Inner-Focused Individualist Self

In highly individualistic cultures, such as North America and Western Europe, the self is viewed as a relatively autonomous, self-sufficient entity that is essentially independent from its surrounding interpersonal context (Geertz, 1984; Triandis, 1989). The goal for an individual is to become independent of others

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by attending to her or his private qualities and cultivating and expressing the inner attributes that uniquely distinguish her or him from others (Markus & Kitayama, 1991). Consequently, internal attributes, such as attitudes, emotions, preferences, and beliefs, become the most diagnostic markers of one's identity. These internal features of self, furthermore, are believed to be the primary determinants of one's behavior, because individuals are expected to act and think on the basis of their beliefs and feelings (e.g., Kashima, Siegal, Tanaka, & Kashima, 1992).

Such representations of self, shaped and reinforced in large part by the culture, strongly influence how individuals comprehend themselves and others. For example, one of the "fundamental" judgment errors observed in Western cultures is the tendency to overestimate the role of inner dispositions while underestimating the contextual determinants of others' behavior (Ross, 1977). Such errors are less widespread in collectivist cultures, such as China or India, where the individual's inner dispositions draw less attention than in the West (e.g., J. G. Miller, 1984; Morris & Peng, 1994).

Because of the value attached to the internal features of the self in individualist cultures, individuals perceive samples of subjective thoughts and feelings as more diagnostic of their true self than observable behavior (Andersen, 1984; Andersen & Ross, 1984). One of the consequences of this belief is that internal attributes and feelings often become important bases of information in self-judgments. The findings from the *feelings as information* research (Clore, Schwarz, & Conway, 1994; Schwarz, 1990; Schwarz & Clore, 1988) exemplify this point. The central finding from this research is that one's subjective experience (e.g., "How do I feel about it?") often functions as an important piece of information in evaluative judgments. For instance, feelings of uncertainty are often interpreted by individuals as indications that they did not understand a poem (Clore & Parrott, 1994), current mood is used as a heuristic for life satisfaction judgments (Schwarz & Clore, 1983), and one's level of empathic feelings is used to infer how much one values the welfare of a person in need (Batson, Turk, Shaw, & Klein, 1995).

The point we find most interesting in these studies is not the specific content of the feelings or of the judgments, but, more simply, the habitual tendency of Western individuals to direct their attention internally in seeking information that will lead to judgments. To many followers of the current literature, the tendency to use internal feelings and thoughts as a primary source of information in self-inference processes is self-evident. It is important to recognize, however, that this is a bias that limits the generality of many current personality and social psychology findings, which were built on the prominent individualist doctrine that "I am essentially what I think and feel."

### The Other-Focused Collectivist Self

Roughly two thirds of the world's population live in collectivist cultures, where the distinction between self and others is blurred (Triandis, 1995). In these cultures, the major normative task is to maintain harmony with others by coming to terms with their needs and expectations. If necessary, individuals are expected to subordinate their personal feelings and wishes to the goals of their in-group (e.g., family). Whereas authenticity

to one's inner feelings is often regarded as a virtue in individualist cultures, in many cases, it is construed as a sign of personal immaturity or selfishness in collectivist cultures. In such settings, individuals' thoughts and feelings acquire full meaning only in reference to the thoughts and feelings of others who are crucially important in the very definition of the self (Markus & Kitayama, 1991, 1994).

On average, collectivist cultures are also *tighter* than individualist cultures (Triandis, 1994). That is, there is more social consensus on notions of what is socially appropriate, and the price an individual pays for deviating from shared norms is higher (e.g., being dismissed from the in-group) than in individualist cultures. Accordingly, to have one's behavior judged as appropriate by others becomes an extremely important task. Because much of one's attention is aimed externally to monitor what others feel, think, and expect, the private elements of the self in this other-oriented culture are not as elaborated and organized as in more individualist cultures (e.g., Bond & Cheung, 1981; Cousins, 1989; Rhee, Uleman, Lee, & Roman, 1995; Triandis, 1989).

Collectivist individuals certainly are aware of and describe their internal attributes. The critical point, however, is that such internal features of the self are not necessarily regarded as the most diagnostic characteristics of an individual, and are seldom accepted as legitimate reasons for one's actions in collectivist cultures (e.g., Kitayama & Markus, 1995; Potter, 1988). Therefore, when making global self-judgments, to attend exclusively to one's inner subjective experiences while neglecting the relational and normative factors of a situation is both inappropriate and "unnatural."

A number of studies illustrate this point. Levenson, Ekman, Heider, and Friesen (1992), for example, measured the autonomic nervous system (ANS) activity patterns between American and Indonesian (the Minangkabau) respondents after asking them to pose in various emotional expressions, such as smiling and frowning, in the absence of actual emotional situations. The two cultural groups showed essentially identical results in their ANS patterns. Somewhat surprisingly, however, the actual subjective emotional experiences corresponding to the ANS profiles were reported only by the American participants. The Minangkabaus, despite showing identical physiological patterns as the Americans, were unable to report the corresponding emotional experiences "correctly." For the Minangkabau participants, to confine and localize the source of emotional experience solely within the boundary of private feelings was unnatural. The relational and interpersonal factors, the key elements of the Minangkabau's emotional scripts, were not present in Levenson et al.'s experimental setting.

In a related vein, the relations based on self-focused positive feelings and global judgments about the self are not as strong in collectivist cultures as in individualist cultures (Kitayama & Markus, 1995). For example, Diener and Diener (1995) found that the size of the correlation between self-esteem and life satisfaction covaried strongly with the degree of individualism of the nations in their sample. In both genders, the degree of individualism of nations correlated .53 with the size of the self-esteem and life satisfaction relation. This is also compatible with Campbell et al.'s (1996) findings that suggest that self-

esteem is less crucial to the overall aspects of the self-concept of Japanese college students than it is to American students.

Conversely, self-focused negative feelings may not be as detrimental to one's overall perception of well-being in collectivist cultures as it is in individualist cultures. Typically, individuals' amount of internal emotional conflict is negatively related to measures of overall well-being among individualist samples. For instance, King and Emmons (1990) and Katz and Campbell (1994) found that the degree of emotional ambivalence between one's urge to express or inhibit emotional feelings correlates negatively with one's level of well-being among U.S. students. However, Suh (1994) found that the correlation between emotional ambivalence and life satisfaction was significantly weaker in collectivist cultures. For instance, although the Chinese students reported significantly higher mean levels of emotional conflict than the U.S. participants in Suh's study, the correlation between this internal state and life satisfaction was .00 among the Chinese, whereas it was  $-.37$  ( $p < .01$ ) among the Americans.

In summary, although private emotions and cognitions about self and others are experienced and expressed in the collective-oriented cultures, such elements of self, located primarily inside the subjective world of each individual, may not necessarily be the fundamental cornerstones on which a person's self-identity is structured. These internal attributes rarely function as legitimizing reasons for one's conduct in everyday life. Rather, one's social roles, public images, and interpersonal relationships are the major cultural tools that shape the contours of a person's selfhood in collectivist societies.

### Chronic Influence of Culture on Life Satisfaction Judgments

The two major components of subjective well-being are life satisfaction and affect balance (Diener, 1984; Diener & Larsen, 1993). *Life satisfaction* is a global cognitive judgment of one's life, whereas *affect balance* refers to the relative preponderance of pleasant compared with unpleasant emotional experience. Although life satisfaction and affect balance intercorrelate and form a strong general subjective well-being factor, they are not identical (Diener, 1994; Lucas, Diener, & Suh, 1996). Whereas life satisfaction is primarily a global cognitive appraisal of one's life as a whole, affect balance is a summed emotional experience of one's reactions to ongoing events in life. Therefore, although rare, it is theoretically possible for a person who does not experience a lot of pleasant emotions to still be satisfied with his or her life as a whole and vice versa.

One of the key assumptions in life satisfaction research is that the judgment of satisfaction is primarily based on the respondents' own set of criteria rather than on objective measures defined by experts (Diener & Suh, 1997). In most cases, individuals are believed to construct a judgment of satisfaction (e.g., Fox & Kahneman, 1992) rather than recall a previously formed judgment. Due to the cognitive complexity involved in the judgment of life satisfaction as a whole, however, it has been demonstrated that the process can be affected by salient situational factors (e.g., Schwarz & Strack, 1991). For instance, situational factors, such as comparison standards (Strack, Schwarz, Chartrand, Kern, & Wagner, 1990), mood induced by weather

(Schwarz & Clore, 1983), and experimentally primed information (Strack, Martin, & Schwarz, 1988) affect judgments of life satisfaction.

Drawing from the earlier discussions on self-systems, however, we propose that culture may have chronic (as opposed to momentary) influences on social judgments by habitually directing the individual's attention to either internal or external sources of information. In the traditional field of social psychology, Fishbein and Ajzen's (1975) theory of reasoned action explicitly examined the relative impact of internal (i.e., attitudes) and external (i.e., subjective norms) information on judgments. Fishbein and Ajzen suggested that the proximal cause of one's behavior is one's intention to engage in the behavior. Two primary determinants of intention are the person's attitude toward the behavior and the person's perception of others' opinion about the behavior. A number of studies based on Fishbein and Ajzen's model, however, indicate that the relative impact of one's private attitudes versus normative beliefs on psychological outcomes varies as a function of the self-system.

For instance, when Fishbein and Ajzen's (1975) model was applied to predict behavioral intentions across different cultures, Bontempo and Rivero (1992) found that the normative component was important in collectivist cultures, whereas Enker (1987) found that personal attitudes were influential in individualist cultures. These results are in line with Davidson, Jaccard, Triandis, Morales, and Diaz-Guerrero's (1976) study in which they found that some Mexican women intended to have another child according to the wishes of their husband, priest, or mother-in-law (or a combination of the three) rather than according to their personal wishes.

Experimental priming of the private or the collective self also yields results similar to the ones found across cultures. In making behavioral decisions, for instance, Ybarra and Trafimow (1996) found that increasing the accessibility of private self-elements ("what makes you different from your family and friends") caused participants to place more weight on their personal attitudes than on norms, whereas priming the collective self-elements ("what do you have in common with your family and friends") caused participants to place more weight on subjective norms than on attitudes (see also Trafimow & Finlay, 1996). Other stable personal characteristics, such as the degree of concern with the opinion of others, also determine the amount of correspondence between attitude and behavior and between norms and behavior (Miller & Grush, 1986).

Most of the past research on life satisfaction judgments has been concerned with the issue of how the judgment process is affected by salient information. The influence of culture on life satisfaction judgments, however, may be chronic. By emphasizing either the private or the relational aspects of the self, cultures can chronically sensitize certain types of information over others in the process of self-judgment. As a result, in individualist relative to collectivist cultures, where individuals habitually attend to and highly regard the internal elements of the self, a stronger correlation between internal feelings and life satisfaction may be found. Conversely, in collectivist cultures, where the self is heavily influenced by social factors, a stronger relation is expected between one's perception of the cultural norms and life satisfaction. These possibilities are examined by studying the affective experience and life satisfaction responses of two

large international samples, consisting of 62,446 participants across 61 nations. Because the prime interest of the study was to examine the relation between the prototypical cultural model of the self and the life satisfaction judgment, discussions are focused on cultural rather than geographical or national levels.

### Study 1: World Values Survey II

Ronald Inglehart and his colleagues at the Institute for Social Research of the University of Michigan collected international data to compare the values and attitudes of 43 societies around the world (World Values Study Group, 1994). The second World Values Survey (WVS II) was inspired by a smaller international survey that was conducted a decade earlier. Among the survey items, questions regarding recent emotional experiences and life satisfaction were obtained. The averaged rating of two leading experts in the field (G. Hofstede and H. Triandis) was used as a measure for the cultural dimension of each nation's degree of individualism versus collectivism (I-C). The correlation between emotional experience and life satisfaction within countries was expected to increase positively with the individualism ratings of the societies. Unfortunately, a measure of the norms for life satisfaction was not available in Study 1.

### Method

#### Sample

The WVS II was carried out in 1990–1993 through interviews on representative national samples. Both random and quota sampling was used; quotas were assigned on the basis of gender, age, occupation, and religion. Although the quality of the sample varied slightly across countries, surveys were carried out by professional survey organizations (Gallup) or university-based institutions. The final data set was cleaned and documented by Ronald Inglehart and his colleagues (World Values Study Group, 1994).

The final analysis of the present study was based on the responses of 55,666 participants (26,877 men, 28,728 women, and 61 nonrespondents) from 41 nations (see Table 1). The median size of the national samples was 1,027, and the smallest national sample was 304 participants (from Northern Ireland). The age of the respondents ranged from 16 to 99 years, with a mean of 41.9 and a standard deviation of 16.5. Samples that were based only on an urban area (Moscow) or that did not include the items relevant to our study (South Korea) were excluded from the analysis. In addition, data from 1,112 respondents were omitted from the analysis because either they were incomplete or they were out of the scale range.

#### Measures and Ratings

Out of the 375 questions included in the original WVS II, we examined items relating to emotional experience and life satisfaction. Individuals' emotional experience was measured by Bradburn's (1969) Affect Balance Scale. The Affect Balance Scale, one of the most widely used measures of affective well-being, asks respondents whether they have experienced a series of five positive (e.g., "proud") and five negative (e.g., "depressed or very unhappy") emotions during the past few weeks. By summing up the number of yes responses to each of the items, a total score ranging from 0 to 5 can be obtained for both positive affect (PA) and negative affect (NA). The affect balance (AB) score is derived by subtracting the NA score from the PA score. Diener and Suh (in press-a) found evidence for the structural stability of this measure across the different countries of the WVS II. Life satisfaction was

Table 1

*World Values Survey: Correlations Between Life Satisfaction and Affect Within Nations*

Nation	n	I-C rating	Correlation with life satisfaction		
			Affect balance	PA	NA
Nigeria	997	3.00	.20	.18	-.11
India	2,461	4.40	.22	.09	-.20
Turkey	1,021	3.85	.30	.19	-.18
Switzerland	1,399	7.90	.31	.18	-.32
Russia	1,910	6.00	.31	.25	-.21
Japan	963	4.30	.32	.14	-.30
Spain	4,123	5.55	.34	.20	-.28
Lithuania	991	4.00	.35	.24	-.26
Brazil	1,770	3.90	.36	.21	-.30
Mexico	1,514	4.00	.38	.35	-.15
Czechoslovakia	1,390	7.00	.38	.27	-.27
Romania	1,095	5.00	.38	.32	-.23
Latvia	853	4.00	.38	.27	-.26
Estonia	996	4.00	.39	.27	-.28
Northern Ireland	304	5.00	.40	.26	-.33
Chile	1,496	4.15	.40	.27	-.29
Byelarus	1,005	4.00	.40	.33	-.25
Bulgaria	1,012	5.00	.40	.35	-.23
China	996	2.00	.40	.33	-.27
Britain	1,475	8.95	.41	.28	-.33
Norway	1,238	6.95	.41	.29	-.29
Argentina	992	4.80	.41	.32	-.28
Austria	880	6.75	.41	.28	-.33
Poland	923	5.00	.43	.31	-.28
Belgium	2,748	7.25	.44	.28	-.34
Hungary	991	6.00	.44	.34	-.29
East Germany	1,327	6.00	.44	.33	-.30
Slovenia	1,023	5.00	.44	.30	-.33
Portugal	1,173	3.85	.44	.32	-.31
France	993	7.05	.45	.28	-.35
Italy	2,003	6.80	.45	.30	-.36
Denmark	1,025	7.70	.45	.32	-.33
Canada	1,718	8.50	.45	.33	-.32
Iceland	700	7.00	.47	.37	-.28
The Netherlands	1,017	8.50	.48	.34	-.34
Ireland	1,000	6.00	.48	.34	-.41
United States	1,802	9.55	.48	.38	-.33
Sweden	984	7.55	.48	.34	-.35
South Africa	2,695	5.75	.50	.47	-.29
Finland	577	7.15	.51	.31	-.42
West Germany	2,086	7.35	.57	.45	-.40
M		5.69	.41	.29	-.29

Note.  $N = 55,666$ . I-C = individualism–collectivism. Higher numbers indicate more individualism. PA = positive affect; NA = negative affect. For all correlations,  $p < .001$ .

measured by asking the respondents, "All things considered, how satisfied are you with your life as a whole these days?" Response options for this single-item measure varied from 1 (*dissatisfied*) to 10 (*satisfied*).

The I-C ratings for each nation were obtained, when possible, by averaging the ratings of two leading experts in the field: Hofstede (1980) and H. Triandis (personal communication, February, 1996). Hofstede's I-C ratings were derived from the responses of IBM employees across 53 nations in the 1960s. Triandis, while being unaware of the hypotheses of the current study, rated the relative degree of I-C of the 41 nations on a scale ranging from 1 (*most collectivist*) to 10 (*most individualist*). The I-C ratings of Triandis were based on his personal judgment reflecting readings of empirical research related to I-C as well as from

his observations of people's everyday behavior in most of the countries included in the present study. Although the two sets of ratings are based on some common grounds, Hofstede's scores have the strength of being based on 1960s empirical data, whereas Triandis's ratings include more recent information. To maximize the advantages of the two ratings, we converted Hofstede's original ratings to a 10-point scale and then averaged them with Triandis's ratings in overlapping nations. The interrater correlation among the 26 overlapping ratings was .78 ( $p < .001$ ). The I-C ratings of 15 nations that were not included in Hofstede's list were based on Triandis's ratings only. The mean and standard deviation of the final I-C rating was 5.69 and 1.82, respectively. Among the 41 nations, China was rated as most collectivist (2.00), and the United States was rated as most individualistic (9.55).

### Results

The correlations between life satisfaction and PA, NA, and AB of each nation are presented in Table 1. The nations are ordered according to the size of the correlation between life satisfaction and AB. The three columns of correlations show the degree of association between life satisfaction and affective experience.

The correlation between life satisfaction and AB within nations, for example, ranges from .20 (Nigeria) to .57 (West Germany). Thus, although the relative preponderance of positive over negative emotional experience correlates positively with life satisfaction in all 41 nations (mean  $r = .41$ ), there are obvious differences in the strength of this relation across nations. We hypothesized that the size of this correlation between life satisfaction and emotional happiness would be larger in individualist cultures and smaller in collectivist cultures. To test our assumption, we first converted the zero-order correlations between life satisfaction and AB to Fisher's  $z$  scores and then correlated the  $z$  scores with the I-C ratings of each nation. In support of our hypothesis, the correlation between life satisfaction and AB was significantly larger in the individualist than the collectivist nations ( $r = .52, p < .001$ ).

We also examined separately the correlations between life satisfaction and PA and between life satisfaction and NA. The correlation between life satisfaction and PA within each nation ranged from .09 (India) to .47 (South Africa), with a mean of .29 across all nations. Life satisfaction and NA, on average, correlated  $-.29$  across the 41 nations. The correlation between life satisfaction and NA was weakest in Nigeria ( $r = -.11$ ) and was strongest in Finland ( $r = -.42$ ). Once again, to examine whether the size of the correlation systematically increased along the I-C dimension, the zero-order correlations were converted to  $z$  scores and correlated with the nations' degree of individualism. As expected, the I-C ratings correlated with the size of both the life satisfaction and PA relation ( $r = .32, p < .05$ ) and the size of the life satisfaction and NA relation ( $r = -.59, p < .001$ ).

In summary, although the relative size of the life satisfaction and affect correlations of some nations were unexpectedly high in the light of their cultural characteristic (e.g., Portugal), the overall results provided support for our hypothesis that inner emotional feelings play a more significant role in one's judgment of overall life satisfaction in individualist nations than in collectivist nations.

The unprecedented size and the representative sampling pro-

cedure of the WVS II data give substantial weight to the current findings. Nonetheless, we sought to conduct a second study for a number of reasons. Most significantly, one of the variables that was of central interest to us (i.e., cultural norms for life satisfaction) was not available in the WVS II data. To examine the relative influence of private feelings and norms on life satisfaction at the individual level, a measure of norms regarding life satisfaction was needed. Second, because of the large percentage of European nations in the WVS II sample, a replication of the results with a sample that included more non-Western nations was desirable. Finally, we wished to complement the psychometric weaknesses of Bradburn's (1969) Affect Balance Scale (i.e., narrowly defined items) and the single-item life satisfaction measure of the WVS II by using measures with stronger psychometric properties.

### Study 2: International College Student Data

The main purpose of the second study was to cross-validate the results obtained from the WVS II data and to examine the relative importance of inner feelings and norms on life satisfaction judgments across cultures at the individual level. The International College Student Data (ICSD), collected in collaboration with international colleagues from 41 nations, were compiled during 1995–1996, to understand various issues relating to national and cultural differences in subjective well-being.

### Method

#### Sample

The analysis reported in Study 2 is based on the responses of 6,780 college students (2,621 men, 4,080 women, and 79 not reporting gender) from 40 countries. Eighty-five percent of the respondents were 18 to 25 years old. Data from Tanzania were discarded from our analysis because of clear irregularities in the use of the scales. Because of incomplete responses, 169 individuals were also dropped from the final analysis. The 40 nations and their respective sample sizes are summarized in Table 2. The nations included in the ICSD sample (15 from Asia; 14 from Europe; 4 from Africa; 4 from South America; and Puerto Rico, Australia, and the United States) were globally more representative than the nations included in the WVS II.

#### Measures

All of the analyses of Study 2 were based on self-report measures. Although it is ideal to conduct a back-translation of the questionnaire for each of the target languages, due to the large number of nations involved in our study, only the Chinese, Japanese, Korean, and Spanish versions went through this process in our study. Questionnaires for the remaining countries were translated from English to native languages by bilingual collaborators who were all professional psychologists associated with major universities in each country.

**Emotional experience.** The emotional experience of the college students was measured by asking how much of the time during the past month they felt four pleasant (joy, affection, pride, and contentment) and four unpleasant (fear, anger, guilt, and sadness) emotions. Participants used a 7-point scale that ranged from 1 (*never*) to 7 (*always*) to indicate how frequently they felt each emotion. The PA score was obtained by summing the scores of the four pleasant emotion items. Similarly, the sum of the four unpleasant emotion items was used as the NA score. The median alpha coefficients for PA and NA were .67 and .65,

Table 2  
College Student Data: Correlations Between Life Satisfaction  
and Affect Within Nations

Nation	n	I-C rating	Correlation with life satisfaction		
			Affect balance	PA	NA
Nepal	98	3.00	.07 <sup>a</sup>	.10 <sup>a</sup>	.00 <sup>a</sup>
Guam	183	5.00	.17	.21	-.05 <sup>a</sup>
Slovenia	50	5.00	.24 <sup>a</sup>	.44	-.12 <sup>a</sup>
Turkey	100	3.85	.28	.36	-.04 <sup>a</sup>
China	554	2.00	.29	.32	-.04 <sup>a</sup>
Ghana	118	3.00	.32	.32	-.16 <sup>a</sup>
Nigeria	243	3.00	.33	.35	-.10 <sup>a</sup>
Zimbabwe	109	3.00	.34	.34	-.12 <sup>a</sup>
Argentina	90	4.80	.38	.40	-.17 <sup>a</sup>
Greece	129	5.25	.39	.36	-.21
India	92	4.40	.39	.47	-.08 <sup>a</sup>
Indonesia	90	2.20	.39	.38	-.14 <sup>a</sup>
Bahrain	124	3.00	.40	.31	-.34
Brazil	112	3.90	.40	.33	-.28
Denmark	88	7.70	.43	.31	-.31
Germany	107	7.35	.45	.41	-.28
South Korea	277	2.40	.45	.46	-.19
Pakistan	153	2.20	.46	.47	-.25
Portugal	139	3.85	.46	.45	-.24
Thailand	92	3.00	.46	.41	-.20 <sup>a</sup>
Estonia	117	4.00	.47	.50	-.13 <sup>a</sup>
Japan	200	4.30	.47	.54	-.05 <sup>a</sup>
The Netherlands	37	8.50	.47	.39	-.33
Lithuania	99	4.00	.48	.44	-.27
Spain	323	5.55	.48	.48	-.26
Hungary	74	6.00	.49	.50	-.24
Peru	129	2.80	.49	.45	-.33
Colombia	99	2.15	.50	.52	-.29
Singapore	131	3.50	.50	.52	-.22
Italy	288	6.80	.53	.46	-.35
Taiwan	532	3.85	.55	.56	-.26
Australia	289	9.00	.57	.56	-.37
Hong Kong	142	4.75	.57	.47	-.31
South Africa	370	5.75	.60	.50	-.46
Finland	91	7.15	.63	.50	-.58
Austria	164	6.75	.64	.55	-.46
Norway	99	6.95	.64	.55	-.46
United States	442	9.55	.64	.59	-.45
Puerto Rico	87	7.00	.68	.55	-.51
Egypt	119	4.40	.74	.71	-.55
M		4.77	.46	.44	-.26

Note.  $N = 6,780$ . I-C = individualism-collectivism. Higher numbers indicate more individualism. PA = positive affect; NA = negative affect. For all correlations,  $p < .05$  unless otherwise noted.

<sup>a</sup> Indicates that correlation did not reach significance at  $p = .05$ .

respectively, across the 40 nations. An AB score was obtained by subtracting the NA score from the PA score.

**Life satisfaction.** Life satisfaction was assessed by the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS is a five-item measure that asks respondents to rate their global life satisfaction from their subjective perspective. The response scale ranges from 1 (*strongly disagree*) to 7 (*strongly agree*), yielding a possible total score range of from 5 to 35. The SWLS has adequate psychometric properties (see Pavot & Diener, 1993) and has demonstrated its validity among Korean (Suh, 1994), mainland Chinese (Shao, 1993), and Russian (Balatsky & Diener, 1993) samples. The median alpha coefficient of SWLS across the 40 nations was .81.

**Norms for life satisfaction.** The normative desirability of life satisfaction was obtained by asking the participants to complete the SWLS from the standpoint of a person who is highly respected and living a good life rather than on the basis of their own experience. In other words, they were instructed to imagine a culturally ideal person and complete the SWLS from the ideal person's perspective. The following instructions were given to the participants:

Using the 1–7 scale below indicate how the ideal person should answer these items. That is, use the scale below to indicate next to each item how a person who is highly respected and living a good life should answer these items. In other words, how satisfied should the ideal person be with his or her life? Remember to answer not your own responses to these items, but as the ideal person would answer.

**Extraversion.** A measure of extraversion was included as a control variable. Extraversion is one of the strongest predictors of SWB (e.g., Fujita, 1991; Myers & Diener, 1995). However, because we wished to narrow our attention to the relative dominance of emotions versus norms on life satisfaction judgments in our analysis, we included an extraversion measure to account for the residual variance possibly resulting from stable individual differences. The 42-item extraversion measure, developed by Ed Diener for the present project, correlated .78 with the Extraversion subscale of the NEO Personality Inventory (Costa & McCrae, 1985) in a preliminary study. A more detailed description of this measure is available from Lucas, Diener, Shao, and Suh (1997).

**Individualism-collectivism.** The I-C ratings of the 40 countries in the present sample were obtained exactly as in Study 1. The interrater correlation between Hofstede (1980) and Triandis (personal communication, February 1996) was .81 among the 27 overlapping countries. As the mean (4.77) and the standard deviation (2.02) of the ratings indicated, the ICSD included a better distribution of nations along the I-C dimension than did the WVS II sample.

## Results

The ICSD were analyzed in two phases. First, we sought to replicate the findings of Study 1 that suggested that emotional feelings are related to life satisfaction more strongly in individualist than in collectivist societies. Second, using an advanced multiple regression technique at the individual respondent level, the relative association of emotions and norms with the judgment of life satisfaction was examined between collectivist and individualist groups of nations.

## Replication

Table 2 contains the within-nation correlations between life satisfaction and PA, NA, and AB. The nations are ordered in terms of the size of the life satisfaction and AB correlation. As in Study 1, it can be seen that there are cultural differences across nations in the size of the correlation between life satisfaction and emotional experiences. Life satisfaction and AB, on average, were correlated .46 across the 40 nations. The correlation in collectivist societies (e.g., Nepal, Turkey, and China) ranged around .30 or less, whereas the correlation was around .60 in many of the individualist nations (e.g., the United States, Finland, and Norway). A correlation of .48 ( $p < .01$ ), almost identical to the correlation observed in the WVS II study, was obtained between the I-C ratings of the nations and the transformed  $z$  score of the life satisfaction and AB correlation.

Also, both the life satisfaction and PA and the life satisfaction

and NA correlations closely resembled the patterns of the WVS II data. The means of the 40 within-nation correlations between life satisfaction and PA and between life satisfaction and NA were .44 and  $-.26$ , respectively. As expected, both PA and NA correlated much more strongly with life satisfaction in more individualistic nations. In fact, as Table 2 illustrates, the life satisfaction and NA correlation did not even reach significance at  $p = .05$  in many collectivist nations (e.g., China, Japan, Nepal, and Nigeria), despite the large sample sizes. As was the case in the WVS II results, the nations' level of individualism related relatively more closely to the size of the life satisfaction and NA correlation ( $r = -.57, p < .001$ ) than to the size of the life satisfaction and PA correlation ( $r = .32, p < .05$ ). The asymmetric relation between life satisfaction and NA versus life satisfaction and PA across cultures seems to suggest that cultures are more different in terms of how much they regulate negative emotions than of the degree to which they treasure positive emotions. Although we are unable to offer a substantive explanation for this serendipitous finding from our present data, the answer may have broad implications for understanding the role of emotions in interpersonal dynamics across cultures.

In summary, the overall results from the ICSD, involving different nations, demographic characteristics of the samples, and measurement instruments than in Study 1, were strikingly similar to the results of the WVS II. Although the size of the life satisfaction and AB relation in some nations (e.g., Hong Kong) was higher than expected, the overall results, coupled with the previous WVS II findings, indicate that the individuals' emotional experiences are related much more strongly with life satisfaction in individualist than in collectivist societies.

### Regression Analysis

To compare the relative influence of feelings versus norms on life satisfaction judgments between individualist and collectivist cultures, the 40 nations were collapsed into three cultural groups (collectivist, individualist, and neutral) on the basis of their I-C rating (1 = *most collectivist*; 10 = *most individualist*). A cultural dimension, such as individualism and collectivism, is essentially a relative concept. Accordingly, respondents of the 13 nations rated in the bottom third of the I-C ratings (Bahrain, China, Colombia, Ghana, Indonesia, South Korea, Nepal, Nigeria, Pakistan, Peru, Singapore, Thailand, and Zimbabwe;  $n = 2,210$ ) were collapsed and labeled the *collectivist* group. Similarly, respondents of 13 nations ranked in the top third of the I-C ratings (Australia, Austria, Denmark, Finland, Germany, Hungary, Italy, The Netherlands, Norway, Puerto Rico, South Africa, Spain, and the United States;  $n = 2,449$ ) were aggregated and labeled as the *individualist* group. Individuals from the remaining 14 nations ( $n = 2,097$ ) were aggregated as the *neutral* group. Twenty-four responses that had missing data on any of the predictors were deleted from the regression analysis.

Results of the regression analysis predicting life satisfaction from emotions (AB) and norms for life satisfaction are summarized in Table 3 for the three groups. Because of the large sample size, the multiple correlations and standardized beta values of the three groups were all significant ( $p < .001$ ). In line with our hypothesis, the relative size of the standardized beta values within each group suggested that emotional feelings (.556) were

Table 3  
*Predicting Life Satisfaction From Emotions and Norms Across Cultures*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$
Collectivist group				
Emotions <sup>a</sup>	.386	.021	.342	.308
Norms for LS	.318	.017	.345	
Neutral group				
Emotions	.452	.021	.422	.234
Norms for LS	.170	.020	.170	
Individualist group				
Emotions	.607	.018	.556	.372
Norms for LS	.188	.019	.161	

Note. LS = life satisfaction. All regression coefficients were significant at the  $p < .001$  level.

<sup>a</sup> Affect balance.

associated much more closely than norms (.161) with life satisfaction in the individualist group. In the collectivist group, however, the contribution of emotions (.342) and the contribution of norms (.345) were approximately equal when predicting life satisfaction.

To check against the possibility that the results might be due to cultural differences in the level of ratings given to the instruments, we also conducted a regression analysis after standardizing the raw data within each nation before collapsing them into the three cultural groups. The standardized data yielded very similar results to the findings obtained with the unstandardized raw data. For instance, the regression coefficients for emotions and norms, respectively, were .530 and .172 in the individualist group and .319 and .270 in the collectivist group. Thus, it is unlikely that the obtained results were consequences of a response set.

To gain a more precise understanding of the relative importance of the two predictors in each of the three groups, however, a dominance analysis (Budescu, 1993) was performed separately for each group. The merit of dominance analysis is that it allows one to statistically decompose the total predicted variance of the regression model according to the importance of each predictor. Although a detailed statistical discussion of this method is available in Budescu's article, consider our case, in which we regressed life satisfaction on emotions ( $E$ ), norms ( $N$ ), and extraversion ( $X$ ). In our case of  $p = 3$  predictors, one can conceive of 7 different regression models: 3 submodels with a single predictor; 3 submodels with 2 predictors ( $E/N$ ,  $E/X$ , and  $N/X$ ); and a submodel including all 3 predictors ( $E/N/X$ ). Dominance analysis compares the squared multiple correlation of the 7 submodels and determines the mean contribution of each of the predictors in all models.

Table 4 summarizes the results of the dominance analysis for each of the three cultural groups. The first two columns represent the variable(s) included in the submodel and the  $R^2$  of



Table 4  
*Dominance Analysis: Contributions of Emotions, Norms, and Extraversion in Predicting Life Satisfaction Across Cultures*

Variable(s)	$R^2$	Additional contribution		
		E	N	X
Collectivist group				
E <sup>a</sup>	.202	—	.106	.045
N	.202	.106	—	.050
X	.137	.110	.115	—
E/N	.308	—	—	.025
E/X	.247	—	.086	—
N/X	.252	.081	—	—
E/N/X	.333	—	—	—
Decomposition of $R^2$		.130	.133	.070
Neutral group				
E	.207	—	.027	.028
N	.062	.172	—	.059
X	.108	.127	.013	—
E/N	.234	—	—	.025
E/X	.235	—	.024	—
N/X	.121	.138	—	—
E/N/X	.259	—	—	—
Decomposition of $R^2$		.165	.035	.059
Individualist group				
E	.346	—	.026	.015
N	.076	.296	—	.065
X	.086	.275	.055	—
E/N	.372	—	—	.012
E/X	.361	—	.023	—
N/X	.141	.243	—	—
E/N/X	.384	—	—	—
Decomposition of $R^2$		.292	.047	.046

Note. E = emotions; N = norms; X = extraversion.

<sup>a</sup> Affect balance.

that particular submodel. The next three columns (one for each predictor) show the increase in  $R^2$  as a result of adding that particular predictor into the model. For instance, the first row of Table 4 shows that in the collectivist group, the  $R^2$  when predicting life satisfaction from emotions is .202 when emotions is the only predictor in the regression model. However, the two right columns show that  $R^2$  increased by .106 when norms was added and increased by .045 when extraversion was added into the single-predictor model. The following rows show the additional contribution of each predictor, this time, to each of the 3 two-predictor models ( $E/N$ ,  $E/X$ , and  $N/X$ ). The  $E/N/X$  row presents the full model's  $R^2$ , for instance, which is .333 in the collectivist group. By averaging each predictor's contribution across all possible models, the full model's  $R^2$  can be decomposed into components that reflect the relative importance of each predictor. For example, in the collectivist group, emotions, norms, and extraversion can be scaled, respectively, as .130, .133, and .070 (bottom row of the collectivist group section). Because these three values add up to the full model's  $R^2$  (.333), the average contribution of each predictor can be determined more precisely than in traditional regression methods.

Figure 1 encapsulates the main findings of the dominance

analysis. The figure summarizes the percentage of predicted variance attributed to emotions and to norms when predicting life satisfaction in each cultural group. In the collectivist group, 39% of the predicted variance can be attributed to emotions, and 40% of the predicted variance can be attributed to norms, suggesting that collectivist individuals making life satisfaction judgments pay as much attention to the normative desirability of a satisfying life as they do to their personal feelings. The remaining 21%, not presented in the figure, is attributed to dispositional variance (extraversion).

A dramatically different pattern is observed in the individualist group. As the bars in the right column of Figure 1 explicitly show, individualists' judgment of life satisfaction is based predominantly on one's emotions in individualist cultures. Specifically, 76% of the variance was due to private feelings, whereas only 12% was attributed to the individuals' perceived normative desirability of life satisfaction. These results fit well with the previous findings from both the WVS II and the ICSD: the stronger correlation between life satisfaction and private feelings in more individualist nations. Although less extreme, the results of the neutral group (64% private feelings and 14% norms) are more similar to the outcomes of the individualist than of the collectivist group.

To recapitulate, the results of both the correlation and regression analyses of the ICSD strongly suggest that the basis of life satisfaction judgment differs considerably across cultures. In individualist cultures, where the self is defined primarily by internal attributes, private feelings seem to be far more important than cultural norms when making global life satisfaction judgments. On the other hand, in collectivist cultures, where the self is defined inherently in relational terms, individuals when appraising their life satisfaction tend to take the perceived normative value of life satisfaction as seriously as their personal feelings.

## Discussion

The most intriguing finding of the present study is that individualists and collectivists chronically rely on different sorts of information in formulating their life satisfaction judgments. For decades, studies of life satisfaction examined the dynamic confluence of various factors, ranging from mood (e.g., Schwarz & Clore, 1983) to life events (e.g., Suh, Diener, & Fujita, 1996) and long-term personality (Diener & Lucas, in press). The present study suggests that culture may also exert a significant influence on the construct of life satisfaction. Results obtained from two large international samples—which included different nations, demographic characteristics, and measures—strongly converge to suggest that individuals' emotional experiences have a much more profound influence on the judgment of life satisfaction in individualist cultures than in collectivist cultures. On the other hand, cultural norms regarding the normative desirability of life satisfaction were as important as emotions when collectivists made life satisfaction judgments.

There are a number of important implications of our study. First, since the time of Freud, studies of well-being have traditionally focused on the psychological congruence within the minds of individuals. Although the general state of psychological congruence may be a universally important prerequisite of well-



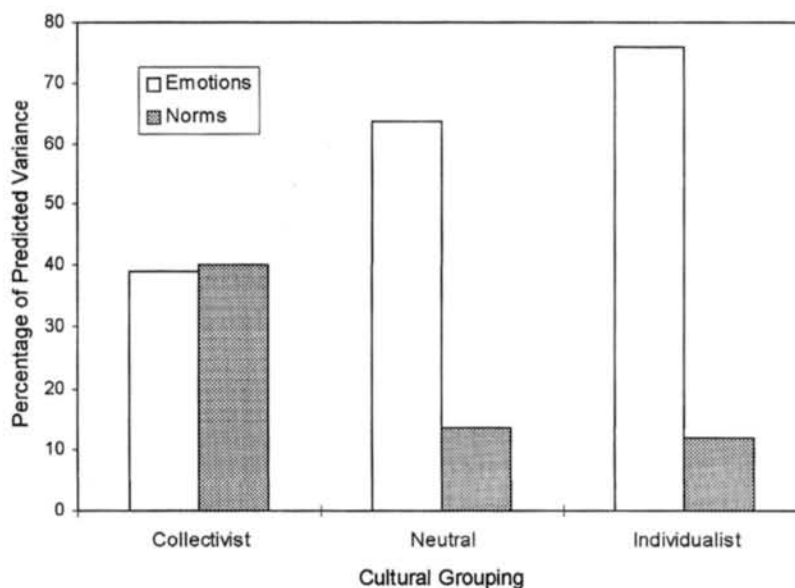


Figure 1. Relative contribution of emotions and norms in predicting life satisfaction across cultures. For the collectivist group,  $n = 2,210$ ; for the neutral group,  $n = 2,097$ ; and for the individualist group,  $n = 2,449$ .

being, most of the interest of Western psychology has been on internal congruences among motives, goals, emotions, and so forth. The results of our study raise the possibility, however, that the link from internal congruence to global well-being may be weaker in more collectivist cultures, where individuals are less inclined to equate internal processes with global well-being. For instance, a sense of congruence between self-defining sets of relations (e.g., as a wife and as a daughter-in-law), between one's wish and others' expectation, or between the self and the psychological situation may be crucial to the collectivists' conception of overall well-being. Such possibilities, in turn, call for the urgent need to uncover indigenous components of life satisfaction, such as relationship harmony (Kwan, Bond, & Singelis, 1997), in the more collective-oriented cultures.

Second, our findings have tapped into an interesting issue for cross-cultural studies on emotion. Although culture is becoming an increasingly important variable in mainstream emotion research (e.g., Kitayama & Markus, 1994; Russell, Fernandez-Dols, Manstead, & Wellenkamp, 1995), much of the attention has been centered on the structural similarity or difference of emotional experience across cultures (e.g., Mauro, Sato, & Tucker, 1992; Mesquita & Frijda, 1992; Roseman, Dhawan, Rettek, Naidu, & Thapa, 1995; Russell, 1991; Scherer & Wallbott, 1994). Along with the question of whether different cultural members are alike or different in their affective reactions to various antecedent conditions of emotion, our findings suggest that the functional value or significance attached to such affective experience may differ across cultures. For instance, regardless of why or how a person feels a specific emotion, the extent to which this phenomenological feeling permeates into and influences other global aspects of his or her life may vary across cultures. Such an interesting possibility, related to the

functional value of emotional experience across cultures, needs to be probed more systematically in upcoming studies.

Third, much of the past cross-cultural psychology research on well-being, including our work, has been concerned with stable mean differences of major variables between cultures or nations (e.g., Diener, Diener, & Diener, 1995; Diener & Suh, in press-b; Diener, Suh, Smith, & Shao, 1995). The present study, however, accentuates the additional need to understand how cultural beliefs about the self and others translate into various psychological processes. As the study of personality requires the understanding of both dispositional characteristics (e.g., traits) and the psychological processes resulting from the stable attributes (Cantor, 1990), to fully comprehend a cultural phenomenon of interest, the contents and the processes resulting from the system should be examined simultaneously (Kitayama, 1992).

Another important point to note is that there is considerable individual difference within each culture. A compelling question is whether the results we observed in the present study at the cultural level (i.e., individualism vs. collectivism) also characterize the judgment and contents of well-being between individuals within a culture (i.e., idiocentrism versus allocentrism; Triandis, Leung, Villareal, & Clack, 1985). For instance, even within a culture, are idiocentrism's life satisfaction responses based more on personal achievements and judged more heavily on the basis of internal experiences than allocentrism? Conversely, are allocentrism's structure of life satisfaction composed more of relational events and affected more frequently by external sources of information, such as social comparisons? Another relevant individual-differences construct is *emotional intelligence* (Mayer & Salovey, 1993). According to Mayer and Salovey, individuals differ in terms of how well they can identify

and use the information provided by their feelings in social behavior. Such findings suggest that even within cultures, emotional experiences may have a stronger impact on life satisfaction judgments in the case of some individuals than of others. Results of the present study suggest interesting directions for future research on individual differences in the judgment of life satisfaction.

Although our study has offered a telescopic perspective on the influence of culture on life satisfaction judgments, many more details need to be supplemented to complete the general picture. In particular, in the future, the main constructs we explored in this study should be assessed with a diverse set of measures. For instance, in adopting Fishbein and Ajzen's (1975) paradigm, in this study, the norms for life satisfaction were measured in a relatively indirect manner. Participants' perception of others' opinion, rather than their actual feeling of congruence between self and the norm, was used as a predictor for life satisfaction. We think that this less obtrusive assessment method may have allowed us a better opportunity to observe the spontaneous effects of prescribed norm on life satisfaction judgments. Although it was encouraging to find consistent results from a recent Asian American college student study that used a direct measure of norm compliance (i.e., perceived congruence between personal goals and others' expectations; Suh & Diener, 1997), we look forward to seeing conceptual replications of our findings through various measurement procedures in the near future.

Another important future task is to move beyond the global predictions of the I-C framework and identify the unique determinants and correlates of SWB within individual cultures. The unexpectedly strong correlation found between life satisfaction and emotions among Hong Kong students, for instance, reminds us that culture should be conceived as an open system that consistently absorbs and reflects the dynamic changes of its social setting (e.g., modernization). To uncover the different shades of subjective well-being across cultures, however, many more fine-grained analyses need to be undertaken. Structured content analysis of life satisfaction reports, for example, may provide penetrating insights about the experiential quality of well-being across cultures.

In closing, we attempted to examine the chronic influence of culture on the judgment of life satisfaction by integrating previous work from social psychology and more recent findings on the self across cultures. In individualist cultures, where the private and internal components of the self crucially define one's identity, individuals' life satisfaction was based primarily on emotional feelings. In more collectivist cultures, where personal identity is shaped in terms of connections with others, the normative desirability of life satisfaction had a significant weight in the individuals' global appraisal of well-being. The field of personality and social psychology, while seeking proximal explanations for its questions, has often understated the effects of other distal but powerful factors, such as culture and society (e.g., Fiske, Kitayama, Markus, & Nisbett, in press; Pepitone & Triandis, 1988; Senn, 1988). In addition to studying how the self creates reality, the present findings illustrate the theoretical benefits of understanding how culture shapes the self.

Philosophers such as Aristotle answered the question of what is the "good life" by offering a set of virtues. Some of these

virtues can be seen as internal characteristics, whereas others refer to the person's relations to others. Similarly, the "good life" can be defined in terms of either positive feelings or one's relations to others. Although a thorough definition of the good life undoubtedly includes both internal and relational aspects, culture may tip the balance between these two sets of factors. For the collectivist, perceived norms about whether one should be satisfied have a strong influence on whether life is thought to be good. In contrast, for the individualist, the key to whether life is good is found internally in one's happiness. Thus, the "good life" cannot be defined universally but has a different locus, depending on one's culture.

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