

Cross-Cultural Correlates of Life Satisfaction and Self-Esteem

Ed Diener and Marissa Diener
University of Illinois

College students in 31 nations ($N = 13,118$) completed measures of self-esteem, life satisfaction, and satisfaction with specific domains (friends, family, and finances). The authors assessed whether cross-cultural variations in the strength of associations were related to societal dimensions including income and individualism. At the national level, individualism correlated $-.24$ (ns) with heterogeneity and $.71$ ($p < .001$) with wealth. At the individual level, self-esteem and life satisfaction were correlated $.47$ for the entire sample. This relation, however, was moderated by the individualism of the society. The associations of financial, friend, and family satisfactions with life satisfaction and with self-esteem also varied across nations. Financial satisfaction was a stronger correlate of life satisfaction in poorer countries. It was found that life satisfaction and self-esteem were clearly discriminable constructs. Satisfaction ratings, except for financial satisfaction, varied between slightly positive and fairly positive.

Subjective well-being (SWB) is now the focus of intense research attention (see Campbell, Converse, & Rodgers, 1976; Diener, 1984; Diener & Larsen, 1993). Subjective well-being is a person's evaluative reactions to his or her life—either in terms of life satisfaction (cognitive evaluations) or affect (ongoing emotional reactions). A number of correlates of SWB have been examined in the search for an understanding of the causes of SWB, for example: (a) personality variables, such as self-esteem (Campbell, 1981), (b) income (Veenhoven, 1991), and (c) social support variables, such as family satisfaction (Campbell, 1981). Little attention has been given, however, to whether the predictors of SWB differ in various cultures. It seems likely that the variables that influence people's evaluations of their lives do vary across cultures. In the present study, we systematically related predictors of life satisfaction to characteristics of the societies: individualism (Hofstede, 1980) versus collectivism, income per person, and cultural homogeneity. We hypothesized that the correlates of SWB would differ across nations with differing characteristics.

Ed Diener and Marissa Diener, Department of Psychology, University of Illinois.

Our appreciation is extended to Harry C. Triandis for his assistance in providing individualism–collectivism ratings of the nations and for his comments on drafts of this article. Our warm thanks are also given to Alex Michalos for organizing the raw data on which this article is based. We appreciate the assistance of Marilyn George in preparing the manuscript. Finally, we express our gratitude to Carol Diener for her comments on the article. In a cross-cultural study related to this report, Diener, Diener, and Diener (1994) explored how objective characteristics of nations predict subjective well-being levels in those societies.

Correspondence concerning this article should be addressed to Ed Diener, Department of Psychology, University of Illinois, 603 East Daniel Street, Champaign, Illinois 61820.

Self-Esteem and Subjective Well-Being

Past research in the West has shown that self-esteem is a strong predictor of life satisfaction. For example, Campbell (1981) found that self-esteem was the strongest predictor of life satisfaction in a national sample of adults in the United States: The correlation between the two was $.55$. However, Kitayama and Markus (in press) questioned the universal importance of self-esteem. They pointed out that in Western culture it is "taken for granted that individuals are motivated to feel good about themselves." They noted, however, that in collectivist cultures "the primary task of interdependent selves is to fit in, to engage, to belong or to become part of the relevant social relationships." In Western cultures people are taught to like themselves, and doing so is a sign of mental adjustment. In cultures in which the collective is stressed, however, feeling good about oneself may be a sign of maladjustment.

We predicted that the importance of the self to life satisfaction would vary systematically across cultures, with greater predictive value of self-esteem in individualistic cultures (Hofstede, 1980; Triandis, 1989). In contrast, we also predicted that family and friendship satisfaction would be stronger correlates of life satisfaction in collectivist cultures. In collectivist cultures a person's life satisfaction may be derived much more from his or her ingroup (family, friends, and coworkers) than from self-esteem. Given that the family is usually the most important ingroup (Triandis, 1989), we predicted that family satisfaction would correlate most highly with life satisfaction in collectivist cultures.

Financial Satisfaction and Life Satisfaction

We predicted that the importance of financial satisfaction also would vary across cultures. In this case, we hypothesized

that financial satisfaction would vary as a predictor of life satisfaction depending on the economic level of the society. Veenhoven (1991) hypothesized that income has a stronger relation to global well-being in poorer nations. Maslow (1954) posited that physiological needs are prepotent over other needs, such as belonging and self-actualization, which appear only after the lower-order needs are fulfilled. Thus, in an impoverished society in which income is low for many people, the most basic needs may not be met for everyone. In contrast, in a wealthier society most people will have fulfilled their physiological needs, and therefore needs such as belonging, which are less tied to income will be prepotent for many individuals. Thus, Maslow's hierarchy of needs can be used to predict that life satisfaction is most strongly correlated with financial satisfaction in the poorest nations. In support of this hypothesis, Diener, Sandvik, Seidlitz, and Diener (1993) found only a very weak relation in the United States between income and SWB. Veenhoven found that, across nations, the correlation between SWB and income was strongest in the poorest nations. Our analysis is a conceptual replication of Veenhoven's finding but an extension to financial satisfaction.

Cultural Homogeneity and Life Satisfaction

We used an additional national variable, cultural homogeneity, in analyzing the differences in trends across cultures. *Cultural homogeneity* refers to the degree to which people in a society share the same culture. When a nation is homogeneous, people share the same characteristics, such as language, values, and religion. In a homogeneous society, the family, friends, and self may not stand out as different and therefore may not be as salient of concepts. Therefore, we included a measure of cultural homogeneity to determine whether it moderated the correlation of life satisfaction with friend satisfaction, family satisfaction, and self-satisfaction.

Note that cultural heterogeneity might have been mistaken for the individualism-collectivism dimension in past work. That is, although cultures certainly differ in the degree to which they emphasize the individual versus the group, they also differ in the degree to which people in the culture are similar. It may have been that cultural similarity is separable from individualism but that the two have been conflated in past theoretical work. Thus, an ancillary purpose of the present study was to examine the correlation between individuality and heterogeneity and to determine their joint impact on life satisfaction.

Life Satisfaction Compared With Self-Esteem

Life satisfaction and self-esteem are variables that both represent global evaluations: in the former case an evaluation of a person's entire life and in the latter case a judgment of oneself. Life satisfaction is a construct that is central to the subdiscipline of SWB (e.g., Andrews & Withey, 1976; Diener, 1984), and self-esteem is a cardinal concept in personality research (e.g., Singer, 1984). Although one could argue that these two concepts are distinct because the target of evaluation is different, we asked whether they are empirically distinct: Do participants discriminate these evaluations? We explored the issue in several ways. For example, the constructs ought to show the same pat-

tern of relations with other variables if they are isomorphic. In addition, other variables ought to add little to the prediction of life satisfaction once self-esteem is controlled if the two constructs are virtually identical.

Absolute Levels of Satisfaction

Another purpose of this study was to describe the levels of life satisfaction, self-esteem, and domain satisfactions of college students in various countries. Are most college students satisfied with their lives, with their life domains, and with themselves? The 7-point scale we used to measure satisfaction in this study had a neutral point of 4; above this point were various levels of positive satisfaction, and below this point were varying levels of dissatisfaction. Diener and Diener (1993) maintained that most people in the United States have a positive level of SWB but also suggested that although most Americans are happy, they rarely report extremely high SWB at the top of the scale. Diener and Diener hypothesized that there is a set point near the level of "somewhat satisfied" around which SWB fluctuates. Cross-cultural data are needed in part because one potential underpinning for a positive level of well-being in the United States is socialization for positive emotions (Diener & Diener, 1993). If, however, the pattern of somewhat positive well-being persists across nations, this indicates that socialization may not be the reason for widespread reports of moderate SWB.

Sex Differences and Similarities

The last area we examined was the similarity between women and men in their levels of satisfaction. It might be predicted that women have lower levels of life satisfaction and self-esteem because they have traditionally possessed less power and fewer resources than men, whereas in most cultures men possess more freedom and status. Nevertheless, many studies have found only small differences between men and women in SWB (e.g., Herzog, Rodgers, & Woodworth, 1982). Although women often report more negative affect than men, recent studies have shown that, in the United States, their levels of global happiness are close to those of men (Fujita, Diener, & Sandvik, 1991). In the present study we sought to expand past findings in this area in several directions. First, we examined women's and men's life satisfaction in many nations, including non-western societies. Second, we assessed not only global life satisfaction but also satisfaction with the self, family, friends, and finances. Finally, we examined the similarity between the correlates of well-being for women and men. It may be, for instance, that because of socialization practices, satisfaction with self and finances is more predictive of life satisfaction for men, whereas for women the best predictors of life satisfaction are friendship and family satisfaction.

Summary

In the present study we sought to determine whether the correlates of life satisfaction differ across cultures and whether characteristics of the societies could predict these variations. We also hoped to determine whether the predic-

tors of self-esteem varied across cultures. Third, we endeavored to discover whether life satisfaction and self-esteem are discriminable constructs. Another purpose of the study was to explore the generality of the pattern of well-being noted in the United States by Diener and Diener (1993)—that most people are somewhat satisfied but do not score in the extremely satisfied range. Finally, we examined across cultures the similarity of SWB, self-esteem, and domain satisfaction ratings between women and men.

Method

Participants

The participants were 13,118 college students, 6,519 of whom indicated that they were women and 6,590 of whom indicated that they were men (and 9 who did not indicate their gender). All analyses have somewhat fewer participants than this total, because for a few participants we were missing data for each variable. The participants were from 49 universities in 31 countries on five continents. Colleagues of Alex Michalos of Guelph University collected data in a global study of college students. These colleagues were located at prestigious universities, smaller private colleges, and one junior college. Thus, the respondents represented a broad spectrum of students, although they came primarily from private and elite institutions. The data used here are the same as those described in Michalos (1991), except that several nations and some participants were dropped from this analysis. The data from several countries were unreadable or unavailable in a standard computer format and so were not included. Furthermore, the data of some individual participants were irregular and were deleted before the data analyses. Michalos reported that students came primarily from various introductory classes and therefore more than half of the participants were in their first or second year of college. The major area of study of respondents did not influence the results. Eighty percent of the sample were in the 17- to 25-year-old age range, 90% were single, and 63% were not employed. The vast majority of respondents were native-born citizens in the nation where the data were collected. Michalos (1991) argued that, although the sample cannot be considered representative of the world's college students, it is the most diverse and broad college student sample collected to date.

The analyses in each nation were computed across all respondents in that country. The nations that were sampled were diverse and came from the following areas: Africa (5), Asia (5), Europe (8), Latin America (3), Middle East (4), North America (3, including Mexico), and the Pacific (3). In some countries only one university participated (e.g., Chile), in several nations two or three colleges were represented (e.g., Philippines), and in other nations there were four or more universities participating (e.g., Canada). To later examine the impact of status of university on the findings, we rated the colleges from 1 (the most prestigious university in the nation) to 4 (a junior college). When several colleges in a nation participated, we computed a mean status value across the universities.

Measures

Respondents completed a demographic sheet that contained questions about age, gender, and other general information. On the following page they rated their satisfaction with 12 life domains (e.g., family, friends, and finances) on a scale from 1 (*terrible*) to 7 (*delightful*), with the option of also responding with *no opinion*. Of the 12 domain satisfaction reports, we used satisfaction with family, friends, self, and finances in this study. Satisfaction with life as a whole was measured on the same 7-point *delighted-terrible* scale at the end of the 12 domains. Family, friendships, and finances were rated toward the beginning, sat-

isfaction with self was rated 10th (followed by transportation and education), and life satisfaction was rated last. The order of ratings was the same in all locations. We counted the no-opinion responses as missing data. The following are the percentages of respondents who expressed no opinion in each domain: Life satisfaction, 3%; Self-esteem, 2%; Family satisfaction, 1%; Financial satisfaction, 2%; and Friendship satisfaction, 1%.

The questionnaire also contained many comparative judgments (e.g., how the participants compare with others) that were not analyzed in this study and came after the ratings we analyzed. The questionnaires were translated from English into the native language in 19 of the nations and were typically administered in large group settings. Investigators collected the data from both classroom volunteers and from participant-pool respondents, depending on the location. On request, Michalos (1991) provided the findings to researchers who had assisted in collecting the data.

External Nation Data

We obtained gross national product (GNP) data from Michalos (1991), except for Puerto Rico, which we obtained from Hoffman (1991). The income figures reflect per capita GNP for 1983 (and for 1985 for Puerto Rico). These years were used because the self-reports were collected in 1984–1986. The mean income per person was \$4,676, with a standard deviation of \$4,297. Ratings of the 31 countries on a 10-point scale of individualism versus collectivism were obtained from H. C. Triandis (personal communication, August 1, 1992). A 1 denoted the most collectivistic country and 10 denoted the most individualistic. The mean collectivism score on a scale of 1 to 10 was 5.4, with a standard deviation of 2.3. The rater was unaware of the data set being used and the questions being asked in this study. The individualism ratings correlated substantially with the individualism index of nations reported by Hofstede (1980), $r(19) = .72, p < .001$. A heterogeneity rating of nations was obtained from Estes (except for Bahrain and Puerto Rico). Estes (1986) ranked nations on their cultural homogeneity versus heterogeneity by summing three variables: the percent speaking the most common language, the percent sharing the dominant religion, and the percent of the nation who were in the same ethnic group. He ordered the nations from most homogeneous (a score of 1) to most heterogeneous (a score of 124). The objective ratings of nations can be seen in Table 1. The heterogeneity ratings are identical for some nations because countries received the same score when there were ties.

Results

Correlates of Life Satisfaction

Four variables (satisfaction with self, family, friends, and finances) were correlated with life satisfaction across all respondents in all nations. All correlations were moderately strong, and with approximately 12,600 participants, were all highly significant: self-esteem, $r = .47$; family satisfaction, $r = .36$; satisfaction with finances, $r = .37$; and satisfaction with friends, $r = .39$. The four types of satisfaction were used to predict life satisfaction in a linear regression equation. Self-esteem was the strongest predictor, although all variables had highly significant standardized β s. The multiple R with 4 and 12,267 df was .61 ($p < .0001$) and the standardized β s were: self-esteem, .32; financial satisfaction, .24; friendship satisfaction, .21; family satisfaction, .15.

The correlations between the predictors and life satisfaction within individual nations can be seen for women in Table 2 and for men in Table 3. The N s for respondents who reported both

Table 1
Characteristics of Nations

Nation	GDP/person	Ind.-Collectivism ^a	Heterogeneity ^b
Austria	9,218	8	11
Bahrain	10,401	3	—
Bangladesh	129	1	17
Brazil	2,032	4	1
Cameroon	845	2	122
Canada	12,284	9	85
Chile	1,920	6	53
Egypt	672	5	28
Finland	10,725	8	11
Germany	11,403	8	17
Greece	3,932	7	1
India	262	4	85
Israel	5,420	6	74
Japan	10,154	4	1
Jordan	1,690	3	11
Kenya	347	3	114
Korea	1,978	3	17
Mexico	2,154	5	62
Netherlands	9,869	9	53
New Zealand	7,709	9	44
Norway	4,007	7	1
Philippines	724	5	108
Puerto Rico	5,477	7	—
Singapore	6,653	5	78
South Africa	2,424	3	96
Spain	4,780	6	61
Tanzania	240	3	124
Thailand	810	4	44
Turkey	1,210	4	28
United States	14,172	10	34
Yugoslavia	2,500	6	89

Note. GDP = gross domestic product; Ind. = individualism. Dashes indicate data not available.

^a Numbers are ratings on a scale that ranged from 1 (*most collectivistic*) through 10 (*most individualistic*). ^b Numbers are ratings on a scale that ranged from 1 (*most homogeneous*) to 124 (*most heterogeneous*).

life satisfaction and gender data are also shown for each country. The average correlations shown at the bottom of the tables were computed by transforming the *rs* to *zs*, averaging the *zs*, and then transforming the average *zs* back to *rs*. As can be seen, the averages of the correlations within nations were very similar to the correlations across all participants. Note that the four variables were significant correlates of life satisfaction in most nations for both genders. Only a few of the correlations within nations were not significantly different from 0. For example, of the correlations between self-esteem and life satisfaction, only 3 of 62 correlations were not significant at $p < .05$.

The conclusion from the above analyses is that satisfaction in the four life domains are highly significant predictors of life satisfaction across all respondents and also within virtually all nations. Despite the general pattern, we should also inquire whether the correlations were homogeneous across nations. We conducted a meta-analysis of the correlations within each of the four domains within each sex across the 31 countries (Hedges & Olkin, 1985). We asked whether the 31 correlations for each predictor (within the same sex) were drawn from the same population. These meta-analyses revealed a significant amount of heterogeneity in virtually every case. For example, the chi-

square value of 157.60 (30, $N = 31$) for women for the correlations between self-esteem and life satisfaction indicates that the 31 correlations form a heterogeneous set that is not drawn from the same underlying distribution. Except for the correlations for men between family and life satisfaction, all the distributions of correlations showed significant heterogeneity at $p < .01$ or less.

The next question is whether the size of the correlations can be predicted from characteristics of the societies. For the self, family, and friend satisfaction correlations, the individualism-collectivism of the nations was used to predict the size of the correlations. We transformed the correlations within each sex within each nation to *zs* and correlated these with the individualism scores across societies. The individualism of the nations correlated significantly for women, $r(29) = .53$, $p < .01$, with the size of the life satisfaction and self-esteem relation. This was also true for men, $r(29) = .53$, $p < .01$, indicating that the size of the relation between life satisfaction and satisfaction with the self was higher in individualistic nations and lower in collectivistic countries. We examined whether this relation might be affected by the variability within nations. Collectivism correlated with variability for men for both life satisfaction and self-

Table 2
Correlations Between Life Satisfaction and Satisfaction With Self, Finances, and Family for Women

Nation	N ^a	Self-esteem	Finances	Family	Friends
Austria	194	.52	.23	.28	.45
Bahrain	221	.21	.53	.41	.22
Bangladesh	88	.27	.52	.33	-.05*
Brazil	163	.40	.43	.43	.43
Cameroon	29	.07*	.36*	.00*	.12*
Canada	985	.60	.26	.33	.41
Chile	115	.57	.37	.31	.33
Egypt	118	.45	.41	.39	.22
Finland	161	.65	.41	.56	.45
Germany	257	.51	.34	.33	.48
Greece	80	.51	.34	.20	.33
India	83	.08*	.39	.33	.31
Israel	154	.22	.11*	.29	.42
Japan	218	.44	.45	.31	.09*
Jordan	54	.30	.51	.52	.12*
Kenya	115	.59	.52	.50	.56
Korea	50	.61	.33	.20	.36
Mexico	65	.42	.48	.35	.25
Netherlands	194	.47	.24	.40	.56
New Zealand	202	.58	.42	.27	.41
Norway	136	.47	.19	.15*	.22
Philippines	645	.42	.45	.44	.37
Puerto Rico	132	.52	.36	.47	.21
Singapore	213	.49	.30	.38	.40
South Africa	154	.39	.35	.29	.24
Spain	138	.38	.34	.17*	.22
Tanzania	70	.62	.67	.46	.33
Thailand	307	.37	.40	.31	.28
Turkey	90	.35	.52	.10*	.44
United States	819	.60	.36	.41	.41
Yugoslavia	155	.47	.29	.46	.32
<i>M</i>	6,405	.45	.39	.34	.33

^a *N* for life satisfaction.

* *ns* at $p < .05$.

Table 3
Correlations Between Life Satisfaction and Satisfaction With
Self, Finances, Family, and Friends for Men

Nation	N ^a	Self-esteem	Finances	Family	Friends
Austria	125	.55	.38	.44	.47
Bahrain	54	.44	.52	.23*	.28
Bangladesh	174	.04*	.22	.19	.17
Brazil	105	.31	.44	.37	.46
Cameroon	130	.42	.40	.39	.46
Canada	615	.59	.25	.39	.49
Chile	141	.37	.26	.43	.35
Egypt	156	.24	.34	.24	.27
Finland	109	.56	.40	.35	.41
Germany	283	.49	.24	.37	.45
Greece	84	.35	.46	.31	.36
India	151	.40	.35	.24	.34
Israel	163	.42	.31	.40	.53
Japan	982	.34	.29	.29	.37
Jordan	225	.37	.50	.36	.24
Kenya	153	.42	.48	.38	.43
Korea	191	.57	.53	.35	.36
Mexico	155	.43	.36	.31	.44
Netherlands	158	.35	.21	.26	.51
New Zealand	112	.61	.09*	.28	.44
Norway	86	.59	.36	.29	.39
Philippines	308	.41	.44	.37	.28
Puerto Rico	165	.50	.34	.40	.56
Singapore	43	.62	.16*	.57	.41
South Africa	121	.25	.36	.29	.25
Spain	137	.39	.41	.35	.41
Tanzania	152	.54	.69	.43	.25
Thailand	264	.41	.34	.35	.35
Turkey	197	.38	.33	.44	.39
United States	415	.56	.40	.41	.48
Yugoslavia	177	.50	.45	.43	.63
<i>M</i>	6,331	.44	.37	.36	.40

^a *N* for life satisfaction.

* *ns* at $p < .05$.

esteem ($r_s = -.40$ and $-.41$, $p_s < .05$) but not for women. When variability (as reflected in the within-nation standard deviations) of life satisfaction and self-esteem was controlled in the life satisfaction and self-esteem correlation as it related to individualism, it made virtually no change in the correlations for either men or women. Because the status of colleges ranged from the most elite to a junior college, we also controlled the ranking of colleges in the major finding above. College status ranking across nations did not correlate with the individualism of the countries, nor did controlling it change the impact of individualism on the life satisfaction and self-esteem relation.

We also correlated the level of individualism with the transformed correlations for family and friendship satisfaction. Contrary to expectation, the family correlations did not differ with the individualism of nations; the relations were quite small and nonsignificant. Recall that for men there was not significant heterogeneity in correlations for family satisfaction across countries. For friend satisfaction, there was a strong positive relation between individualism and the size of the correlations between friend satisfaction and life satisfaction for women, $r(29) = .53$, $p < .01$; and for men, $r(29) = .59$, $p < .001$. These correlations indicate that the size of the relation between friend-

ship satisfaction and life satisfaction was strongly dependent on the degree of individualism of the country, with the correlation between friendship satisfaction and life satisfaction being stronger in individualistic nations. In contrast, the homogeneity of the society did not significantly moderate the relation between life satisfaction and any of the predictor variables. Furthermore, we found that homogeneity did not, when used as a control variable, change the impact of individualism on the life satisfaction and self-esteem correlation. It is noteworthy that the individualism of a society correlated only $-.24$, ns , with its heterogeneity.

In the domain of financial satisfaction, we correlated the transformed correlations with life satisfaction across countries with the income per person of the society. The size of the relation between financial satisfaction and life satisfaction (r to z transformed) across countries varied inversely with income for women, $r(29) = -.36$, $p < .05$, and was of borderline significance for men, $r(29) = -.32$, $p < .10$. Thus, financial satisfaction tended to be a stronger predictor of life satisfaction in poor than in wealthy nations.

Correlates of Self-Esteem

Self-esteem covaried significantly with each of the three other satisfaction domains across the entire sample: friend satisfaction, $r(12,848) = .31$, $p < .001$; family satisfaction, $r(12,816) = .28$, $p < .001$; and financial satisfaction, $r(12,782) = .19$, $p < .001$. A regression equation predicting self-esteem revealed that friendship satisfaction was the strongest predictor (standardized $\beta = .24$, $p < .0001$), followed by family satisfaction (standardized $\beta = .19$, $p < .0001$). Although financial satisfaction was a weaker predictor (standardized $\beta = .11$), it was also highly significant given the large sample size. The covariation between self-esteem and the predictors is presented for both sexes in Table 4. As can be seen, the average correlation with self-esteem was strongest for satisfaction with friends and weakest for satisfaction with finances. Self-esteem covaried significantly with friend and family satisfaction in most societies for both sexes. In contrast, financial satisfaction was not a significant correlate of self-esteem in about one half of the nations.

We computed meta-analyses for each predictor variable separately for each sex. All distributions of correlations were significantly heterogeneous, with the female friend correlations reaching $p < .05$ and the other distributions being significant at $p < .01$. For example, the chi-square (30, $N = 31$) for the female family correlations was 77.63 ($p < .01$), indicating that the correlations within nations were drawn from different distributions.

However, unlike the case for life satisfaction, the self-esteem correlations were not related to the individualism of the nations, or to their income levels. We found that the correlation between self-esteem and family satisfaction in countries depended significantly on the heterogeneity of the nation: female $r(27) = .45$, $p < .05$; male $r(27) = .42$, $p < .05$. In more homogeneous nations there was a smaller relation between self-esteem and satisfaction with one's family.

Life Satisfaction Compared With Self-Esteem

We conducted a number of analyses to explore the discriminant validity of self-esteem and life satisfaction. First we made

Table 4
Predictors of Self-Esteem

Nation	Women			Men		
	Friends	Family	Finances	Friends	Family	Finances
Austria	.32	.24	.11*	.40	.26	.22
Bahrain	.17	.31	.20	.35	.36	.24*
Bangladesh	.19*	.17*	.18*	.32	.10*	.06*
Brazil	.31	.21	.10*	.09*	.24	.14*
Cameroon	.31*	.46	-.04*	.29	.22	.04*
Canada	.29	.25	.21	.39	.24	.17
Chile	.40	.11*	.10*	.19	.20	.17
Egypt	.27	.21	.16*	.18	.29	.03*
Finland	.33	.44	.22	.38	.14*	.26
Germany	.35	.22	.08*	.30	.13	.06*
Greece	.28	.17*	.25	-.01*	-.15*	.19*
India	.32	.25	.30	.21	.13*	.23
Israel	.26	.22	.12*	.36	.39	.12*
Japan	.32	.34	.30	.30	.26	.15
Jordan	-.12*	.24*	.49	.28	.32	.27
Kenya	.57	.56	.53	.39	.37	.03*
Korea	.41	-.04*	.02*	.30	.17	.17
Mexico	.42	.43	.20*	.36	.28	-.01*
Netherlands	.30	.25	.13*	.30	.21	.13*
New Zealand	.27	.20	.30	.34	.20	-.06*
Norway	.23	.26	.00*	.44	.23	.22
Philippines	.27	.38	.22	.35	.37	.31
Puerto Rico	.34	.33	.19	.46	.24	.19
Singapore	.34	.16	.15	.29*	.21*	.28*
South Africa	.19	.30	.11*	.20	.29	.08*
Spain	.24	-.06*	.16*	.12*	.08*	.10*
Tanzania	.43	.48	.42	.46	.32	.44
Thailand	.34	.20	.16	.30	.24	.02*
Turkey	.16*	.15*	.17*	.28	.25	.16
United States	.33	.30	.28	.38	.38	.27
Yugoslavia	.26	.23	.21	.50	.40	.07*
<i>M</i>	.30	.26	.20	.31	.24	.15

* *ns* at $p < .05$.

a comparison of the extent to which the two covary with the predictor variables. Across all respondents, life satisfaction correlated more strongly with the predictors than did self-esteem: family satisfaction ($r = .36$ vs. $.28$, $p < .001$), friend satisfaction ($r = .39$ vs. $.31$, $p < .001$), and financial satisfaction ($r = .37$ vs. $.19$, $p < .001$). This same pattern can be seen in the average correlations across nations, with the life satisfaction relations being stronger.

Perhaps the strongest case for discriminant validity can be seen in correlations of variables across the two sexes. When mean levels of life satisfaction and self-esteem for nations were correlated across gender, there was strong convergence of the same variables: female and male average life satisfaction correlated $r(29) = .92$, $p < .001$, and female and male average self-esteem covaried at $r(29) = .84$, $p < .001$. In contrast, female life satisfaction varied with male self-esteem $r(29) = .52$, $p < .01$, and male life satisfaction covaried with female self-esteem only $r(29) = .25$, *ns*. The convergent correlations are both significantly larger (McNemar, 1969) than the two multitrait correlations (all $ps < .01$). Thus, although self-esteem and life satisfaction appear to be related, men and women from the same

nations strongly converge only when the same variable is in question.

Finally, the divergence of life satisfaction and self-esteem can be explored through an analysis of variance (ANOVA) across nations in which life satisfaction and self-esteem were treated as repeated measures (within-subjects) variables. There was not only a significant difference between the two variables, $F(1, 12,550) = 741.51$, $p < .001$, but there also was a significant interaction between variables and nation, $F(30, 12,550) = 41.45$, $p < .001$, indicating that life satisfaction and self-esteem differed in their relative positions when considered across nations.

Satisfaction Levels

Tables 5 and 6 display the mean satisfaction scores for each variable for all nations for women and men, respectively. It can be seen that most means for all five types of satisfaction were positive. Other than financial satisfaction, 247 of 248 means (variables \times gender \times nations) were above the neutral point of 4.0. This was significantly different than the number of means

Table 5
*Means and Standard Deviations for Satisfaction With Self, Finances,
 Family, Friends, and Life for Women*

Nation	Self		Finances		Family		Friends		Life	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Austria	4.8	1.2	4.3	1.2	5.1	1.3	5.2	1.1	5.0	0.9
Bahrain	5.6	1.3	5.1	1.3	5.8	1.4	5.7	1.2	4.9	1.2
Bangladesh	5.1	1.2	4.4	1.0	5.7	1.2	5.5	1.2	4.5	1.3
Brazil	5.8	1.0	3.9	1.3	5.6	1.3	5.3	1.2	5.0	1.0
Cameroon	5.6	1.0	3.6	1.2	5.1	1.0	5.0	1.0	4.4	0.6
Canada	5.1	1.1	4.0	1.4	5.4	1.2	5.5	1.1	5.1	0.9
Chile	5.0	1.1	4.3	1.1	5.3	1.1	5.3	1.0	4.9	0.8
Egypt	5.1	1.5	4.9	1.0	5.3	1.5	5.5	1.3	4.5	1.1
Finland	5.2	1.1	4.8	1.3	5.9	1.1	5.5	1.2	5.5	1.1
Germany	4.7	1.1	4.1	1.2	5.1	1.3	5.1	1.2	4.7	0.9
Greece	5.0	1.0	4.6	0.8	5.4	1.0	5.2	1.1	4.8	1.0
India	5.1	1.0	4.6	1.1	5.5	1.2	5.2	1.2	4.8	1.0
Israel	5.5	0.9	3.6	1.3	5.7	1.1	5.3	1.1	4.9	0.9
Japan	4.3	1.3	4.0	1.1	5.2	1.3	5.2	1.1	4.3	1.1
Jordan	5.7	1.4	4.7	1.2	5.8	1.3	5.3	1.5	4.5	1.0
Kenya	4.9	1.4	3.7	1.2	5.0	1.4	4.8	1.3	4.4	1.0
Korea	3.9	1.5	4.0	1.4	4.6	1.4	4.6	1.3	4.0	1.4
Mexico	5.4	0.9	4.6	0.9	5.4	1.2	5.2	1.0	5.1	0.8
Netherlands	4.8	1.2	4.7	1.2	5.3	1.4	5.5	1.2	5.2	1.0
New Zealand	4.9	1.0	4.0	1.2	5.2	1.3	5.6	0.9	5.1	1.0
Norway	4.9	1.2	3.9	1.3	5.2	1.1	5.4	1.1	5.1	0.9
Philippines	5.3	0.9	4.6	1.0	5.3	1.2	5.7	1.0	5.0	0.9
Puerto Rico	5.2	1.1	4.7	1.1	5.4	1.1	5.4	1.0	5.0	1.0
Singapore	4.8	0.9	4.3	1.2	4.9	1.0	5.3	1.0	4.8	0.9
South Africa	5.4	1.1	3.3	1.4	5.5	1.0	5.3	1.1	4.6	1.2
Spain	4.3	1.1	4.0	1.1	5.0	1.0	5.2	0.9	4.6	0.9
Tanzania	5.4	1.2	3.8	1.4	5.3	0.8	5.2	0.8	5.0	1.1
Thailand	5.3	1.1	4.2	1.1	5.6	1.3	5.1	1.1	4.6	0.9
Turkey	5.1	1.1	4.2	1.0	5.1	1.3	4.7	1.2	4.2	1.0
United States	5.1	1.2	4.2	1.4	5.5	1.3	5.6	1.1	5.3	1.0
Yugoslavia	4.9	1.3	4.2	1.1	5.3	1.3	5.1	1.2	4.7	1.1

above neutral that one would expect by chance ($p < .0001$). Only Korean women's satisfaction with self fell slightly below the neutral point. The average score across all participants for life satisfaction was 4.82, and for self-esteem it was 5.06. For financial satisfaction, only 38 of 62 means were above neutral, a number not significantly different than what one would expect by chance. The mean across all participants for financial satisfaction was 4.14.

Table 7 shows the percent of women and men in each nation who responded *above* the neutral point for the two key variables of life satisfaction and self-esteem. These figures support the conclusion that the majority of respondents in most nations were above neutral for life satisfaction and self-esteem. As can be seen, a majority of individuals were satisfied with the self (except respondents in Korea and Japan, and women in Spain). Life satisfaction was low not only in the two nations with low self-esteem but also in several very poor countries (e.g., Bangladesh and Cameroon). Across all nations, 70% of women reported a positive level of life satisfaction, and 73% of women reported a positive level of self-esteem. For men, 63% reported positive life satisfaction, and 70% reported a positive level of self-esteem. In contrast, only 8% of women and 14% of men reported life satisfaction below neutral, and 8% of women and 12% of men reported self-esteem below the neutral point of the

scale. For financial satisfaction, only 48% of women and 41% of men were above neutral. Thus, with the exception of financial satisfaction, it appears that the majority of respondents reported positive levels of satisfaction in all domains. The highest levels of satisfaction were expressed with friends and family (the percent of positive responses varied from 76 to 81).

Most participants, however, did not report life satisfaction at the top of the scale. Only 4% of the total sample reported a 7 for life satisfaction, a response indicating that their life is "delightful." In the most satisfied nation, only 12% scored at the top of the life satisfaction scale. This small percentage is consistent with Diener and Diener's (1993) conclusion that, although most respondents are positive, they are not so positive that they report that their life is perfect. In contrast to the life satisfaction findings, 11% of respondents scored at the top of the scale for self-esteem. This percentage is significantly higher than that for life satisfaction, $\chi^2(1, N = 12,934) = 389.51, p < .0001$. In the most positive nation, 33% scored at the top of the self-esteem scale.

Sex Comparisons

Although there were scattered differences between the responses of women and men, the similarities between the two are

Table 6
*Means and Standard Deviations for Satisfaction With Self, Finances,
 Family, Friends, and Life for Men*

Nation	Self		Finances		Family		Friends		Life	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Austria	5.1	1.2	4.3	1.2	4.9	1.4	5.0	1.2	4.9	1.1
Bahrain	6.0	1.1	4.8	1.3	6.0	1.3	5.7	1.4	5.1	1.1
Bangladesh	5.0	1.2	3.9	1.2	5.5	1.4	5.2	1.3	4.2	1.0
Brazil	5.8	1.0	3.6	1.4	5.5	1.4	5.4	1.3	4.9	1.0
Cameroon	5.0	1.3	3.0	1.2	4.6	1.1	4.7	1.1	4.1	1.0
Canada	5.2	1.1	4.1	1.4	5.4	1.2	5.4	1.2	5.1	1.0
Chile	5.3	1.0	4.1	1.1	5.3	1.2	5.1	1.2	5.0	0.9
Egypt	5.3	1.3	4.3	1.3	5.4	1.3	5.5	1.2	4.6	1.1
Finland	5.2	1.2	4.8	1.3	5.4	1.0	5.0	1.1	5.4	0.9
Germany	5.0	1.1	4.2	1.3	4.9	1.1	5.0	1.2	4.7	0.9
Greece	5.1	1.0	4.6	1.2	5.6	1.0	5.3	1.2	5.0	0.9
India	5.2	1.3	4.5	1.3	5.4	1.3	5.1	1.5	4.7	1.1
Israel	5.5	0.9	3.5	1.5	5.6	1.2	5.0	1.0	5.0	0.9
Japan	4.0	1.3	3.8	1.2	5.0	1.3	5.0	1.2	4.1	1.0
Jordan	5.5	1.3	4.3	1.4	5.7	1.3	5.5	1.2	4.5	1.2
Kenya	5.2	1.2	3.5	1.3	5.3	1.1	5.1	1.3	4.5	1.0
Korea	4.2	1.5	4.0	1.5	5.3	1.4	5.2	1.2	4.3	1.5
Mexico	5.3	0.9	4.3	1.0	5.3	1.0	5.1	0.9	5.1	0.8
Netherlands	5.3	1.0	4.5	1.4	5.4	1.1	5.6	1.1	5.1	1.0
New Zealand	5.0	1.0	4.3	1.3	5.2	1.3	5.2	1.1	5.1	0.9
Norway	5.0	1.0	4.4	1.3	5.3	1.0	5.1	1.1	5.2	0.9
Philippines	5.3	1.0	4.8	1.0	5.5	1.2	5.7	1.1	5.2	1.0
Puerto Rico	5.6	1.1	4.6	1.0	5.6	1.0	5.5	1.0	5.3	0.9
Singapore	5.2	0.9	4.6	1.0	4.4	1.5	5.1	1.0	4.7	0.9
South Africa	5.3	1.1	2.8	1.4	5.4	1.2	5.3	1.1	4.4	1.1
Spain	4.7	1.1	3.8	1.3	4.7	1.1	5.2	0.9	4.5	0.9
Tanzania	5.6	1.2	3.7	1.4	5.4	1.0	5.2	1.0	5.0	1.3
Thailand	5.5	1.2	3.8	1.2	5.3	1.3	5.1	1.1	4.6	1.0
Turkey	5.2	1.1	4.0	0.9	5.2	1.3	4.9	1.2	4.2	1.0
United States	5.3	1.1	4.2	1.4	5.3	1.3	5.5	1.2	5.3	1.0
Yugoslavia	5.0	1.3	4.2	1.3	5.3	1.3	5.1	1.3	4.7	1.2

striking. As mentioned previously, the means across nations for women and men strongly covaried for life satisfaction and self-esteem. They also covaried for family satisfaction, $r(29) = .65$, $p < .001$; friend satisfaction, $r(29) = .65$, $p < .001$; and financial satisfaction, $r(29) = .79$, $p < .001$. There was also strong convergence for the percentages of people above neutral. For example, the percentage of women and percentage of men in countries who scored above neutral on life satisfaction correlated .95 across nations.

At the individual level, the correlational patterns between life satisfaction and the predictors were similar for men and women, and this also was true in the case of self-esteem. The covariation across individual participants between self-esteem and life satisfaction was .47 for women and .48 for men ($n.s.$ difference). None of the correlations between self-esteem and the predictors were significantly different for women and men: family satisfaction ($r_s = .29$ and $.28$), friendship satisfaction ($r_s = .30$ and $.33$), and financial satisfaction ($r_s = .20$ and $.17$). For life satisfaction, family satisfaction was not a differential predictor for the two sexes ($r_s = .36$ and $.35$). Because of the large sample, small differences in correlations were significant in the case of life satisfaction and friendship satisfaction, $r_s = .37$ and $.40$, $t(12,658) = 2.36$, $p < .05$ and financial satisfaction, $r_s = .34$ and $.38$, $t(12,590) = 2.70$, p

$< .01$. Striking similarities in the average correlations across sexes can be seen in Tables 2, 3, and 4.

In the case of means, ANOVAs revealed significant sex differences for most variables, however, the discrepancies were quite small in absolute terms. Across all respondents, women and men did not differ significantly on life satisfaction ($M_s = 4.78$ and 4.79). On the other four variables, there were small but significant differences (female means listed first): self-esteem, $M_s = 5.07$ versus 5.18 , $F(1, 12,924) = 18.28$, $p < .001$; family satisfaction, $M_s = 5.34$ versus 5.28 , $F(1, 12,980) = 5.29$, $p < .05$; friend satisfaction, $M_s = 5.27$ versus 5.21 , $F(1, 13,014) = 6.24$, $p < .05$; and financial satisfaction, $M_s = 4.23$ versus 4.09 , $F(1, 12,948) = 24.25$, $p < .001$. The picture is one of striking similarities rather than dramatic differences.

Discussion

Life satisfaction was significantly correlated with satisfaction with the self, both across the entire sample and also in most nations. The correlations were found, however, to significantly differ in size across societies. When the individualism of the countries was related to the correlations, we found that the covariation between self-esteem and life satisfaction was lower in collectivistic nations. Similarly, satisfaction with friends and

Table 7
Percentage of Respondents Above Neutral on Well-Being

Nation	Men		Women	
	Life satisfaction	Self-esteem	Life satisfaction	Self-esteem
Austria	71	72	70	64
Bahrain	72	87	72	83
Bangladesh	27	67	33	77
Brazil	70	90	70	90
Cameroon	35	69	45	89
Canada	78	77	79	75
Chile	76	79	73	73
Egypt	63	78	52	76
Finland	87	74	84	79
Germany	66	68	65	59
Greece	68	85	66	69
India	62	75	67	78
Israel	75	88	76	88
Japan	36	34	37	46
Jordan	60	85	54	87
Kenya	53	75	56	71
Korea	49	45	44	38
Mexico	83	86	80	83
Netherlands	80	82	78	60
New Zealand	79	75	73	68
Norway	83	75	83	73
Philippines	81	84	76	82
Puerto Rico	87	81	76	75
Singapore	58	83	69	68
South Africa	59	80	59	86
Spain	54	60	61	42
Tanzania	69	81	71	77
Thailand	56	81	52	78
Turkey	39	78	47	78
United States	83	78	82	72
Yugoslavia	66	73	61	63
Across nations	63	70	70	73

with family covaried with life satisfaction, and these correlations also varied significantly and systematically across nations. The individualism of a society correlated positively with the friendship satisfaction and life satisfaction relation, indicating that satisfaction with friends was a weaker correlate of life satisfaction in collectivistic societies. Contrary to expectations, the relation between family satisfaction and life satisfaction was not stronger in collectivistic societies. Finally, the strength of the financial satisfaction and life satisfaction relation was dependent on the income of a country; there was a stronger covariation of financial satisfaction with life satisfaction in poorer societies.

Our results on financial satisfaction support Veenhoven's (1991) hypothesis that the economic condition of a nation moderates the relation between financial satisfaction and life satisfaction. There was a greater correlation between financial satisfaction and life satisfaction in less wealthy countries, supporting the idea of a need hierarchy in which finances become less important to people once they have met their basic physical needs. Similarly, Diener, Sandvik, Seidlitz, and Diener (1993) found a curvilinear relation in the United States between income and SWB, showing that income had little influence at the upper levels of wealth. These findings point to a decreasing mar-

ginal utility for money as one climbs the income ladder. Once most people obtain an adequate level of a resource such as money to meet the goals prescribed by societal norms, that resource may correlate less with SWB. In poor societies, however, many people probably still lack the goods and services that are seen as important to happiness in that culture, and therefore the amount of money the person has is a stronger causal factor in her or his happiness. The importance of the present finding is in showing that finances can vary in importance to SWB, depending on objective characteristics of the society. People certainly vary in financial satisfaction in wealthier nations, but this has little impact on their life satisfaction, because other goals have come to the fore.

Our findings do not support the contention that wealthier nations are more materialistic, valuing material good to the exclusion of all else. For example, family satisfaction was high and correlated with life satisfaction in wealthier nations. This set of findings supports the idea of a postindustrial society in which attention turns from the acquisition of material goods to self-development and other pursuits.

The correlates of self-esteem also differed across nations. Financial satisfaction, family satisfaction, and friendship satisfaction, all showed significantly varying correlations with self-esteem across countries. In this case, however, heterogeneity of the society in some cases moderated the relations. The covariation between self-esteem and family satisfaction was lower in homogeneous nations for both men and women. Several explanations of this relation are possible. It might be, for example, that a person's feelings about him- or herself are more dependent on the family in a heterogeneous culture because it is primarily within the family that values are shared. Or it may be that in a heterogeneous culture one's self and family stand out together as separate from the society. The relation between self-esteem and family satisfaction deserves further research attention.

The results of the present study have clear implications for the importance of cross-cultural replication of psychological findings. Self-esteem and life satisfaction have been found to be closely related in studies within the United States. If we stopped with this finding alone, however, we would be unaware that the relation between self-esteem and life satisfaction differs across cultures. Indeed, even if we replicated the finding in a nonwestern culture, we might find that self-esteem and life satisfaction were correlated significantly greater than 0, and thus not recognize the influence of culture. Thus, our findings point to the necessity of replicating studies across diverse cultures before they can be accepted as universal. Furthermore, our results point to the need for examining whether effect sizes systematically vary across cultures.

The fact that the influence of self-esteem on life satisfaction differs by cultures follows theoretically from the idea that individualists are socialized to attend to their own internal attributes. Thus, a person's unique attitudes, emotions, and cognitions are highly salient characteristics when making judgments about life in individualistic cultures. Therefore, it is not surprising that how a person feels about him- or herself is more strongly correlated with life satisfaction when the individual is the focus of attention. In contrast, collectivists are socialized to view their

place in the social order as of utmost importance. Collectivists are socialized to fit into the community and to do their duty. Thus, how a collectivist feels about him- or herself is less relevant to his life satisfaction than is his or her view of whether he or she behaves properly in the organized social order. Thus, life satisfaction for the collectivist may be more externally based. In fact, life satisfaction itself is less likely to be a salient concept for the collectivist and therefore may correlate at lower levels with predictor variables because it is a less well-formed judgment and therefore more likely to be influenced by momentary or normative factors (Diener, Suh, Smith, & Shao, in press).

An additional explanation for the differential importance of self-esteem in collectivist and individualistic nations is in terms of the socialization of affect. Diener et al. (in press) found that students in the United States believe positive affect to be more normative, whereas students in Korea and China were more accepting of the experience of negative affect. On the basis of this finding, one can hypothesize that life satisfaction may be based more on positive feelings in individualistic nations, for example feelings, about the self. Conversely, in collectivist nations life satisfaction might be influenced by a more prevalent negative focus and therefore be more dependent on how many problems and social conflicts the person faces.

There has been a search in the SWB literature for the causes of well-being. This study clearly reveals that those causes may differ across cultures. Veenhoven (1991) showed that the influence of income on SWB differs across nations. Diener and Fujita (in press) found that the predictors of individual SWB differed in an analogous manner. Based on a person's goals, different resources predicted her or his happiness. Taken together, these results clearly indicate that there are different predictors of happiness for different people and in different societies.

One issue we addressed in the present article is whether self-esteem and life satisfaction are truly discriminable constructs, and our data indicate that they are. The level of life satisfaction of men correlated very strongly across nations with the level of life satisfaction of women in that country, but at a much lower level with self-esteem. Similarly, the levels of self-esteem of men and women correlated quite strongly across nations, but at a weaker level with life satisfaction. More important, variables such as financial and family satisfaction are related to life satisfaction beyond the influence of self-esteem. Finally, life satisfaction and self-esteem change their relative positions in comparison with each other across nations. Thus, although self-esteem is likely to influence life satisfaction (or vice versa), the two variables are clearly discriminable.

The present study demonstrates that college students from around the world are predominantly satisfied with their lives, with themselves, and with the social domains of family and friends. This conclusion, however, must be circumscribed in several ways. First, it is based on college students rather than on nationally representative samples. The second point that must be made in delimiting the present findings is that the majority of university students were satisfied with their finances in only slightly more than half of the countries. Across societies, only 44 percent of college students showed slight to strong satisfaction with their finances. If positive levels of satisfaction are the

rule, why might college students be dissatisfied with their finances? They may have very high aspirations but be unable to meet them, or they may feel that their current finances are marginal but that their situation will improve dramatically when they graduate. College students may not adapt their aspirations to their financial level in order to be more satisfied because they expect their financial status to improve dramatically.

The results also support the arguments of Diener and Diener (1993) in that most respondents, although positive, were not extremely positive: Most did not respond at the top of the scale. The picture drawn by Diener and Diener is that most people in the United States are somewhat happy and satisfied but have room for improvement. The international college student data present the same picture.

It is notable that cultural homogeneity and collectivism were not significantly correlated. In fact, the correlation was in the direction that more heterogeneous societies were more collectivistic. This finding suggests that there may be two important dimensions that influence how people view their social worlds. One dimension influences whether others are viewed as similar or dissimilar, and the second dimension affects whether one makes sharp distinctions between ingroup and outgroup members. Conceptualizing societies with these two dimensions suggests a fourfold typology in which strangers may be seen as similar but either as outgroup members or as simply other individuals who are not differentiated according to the outgroup categorization. Similarly, one's close associates may be either relatively similar to oneself or relatively different from oneself in homogeneous versus heterogeneous cultures, respectively. The differential impact of these national characteristics on the factors that influence life satisfaction suggests that they are theoretically separable. Viewing people as similar or dissimilar from oneself appears to be distinct from viewing people in terms of their group identity or as individuals.

The last set of findings that is noteworthy is the striking similarity between the data for men and women. The strong convergence between the satisfaction responses of the sexes was consonant with most past research, although this research has primarily been conducted in western nations. Most past studies, however, have focused on the similarity of mean levels between men and women, whereas the present research extends the similarity findings to predictors of life satisfaction and self-esteem. Men and women were similar in satisfaction across domains, suggesting that aspiration levels shift to some degree to match one's life. The marked resemblance between the SWB of women and men in this study may, however, be due to the use of college students as respondents. It may be that college women and men are more similar than others who are following more traditional roles.

The present study possesses several notable strengths: the inclusion of diverse and less westernized nations, a very large sample size and the inclusion of many nations, and a number of important predictor variables. The participants were, however, all college students. This fact may have reduced the differences between the sexes and created higher levels of satisfaction. It should be noted, however, that the homogeneity of the sample is a strength in some respects. For example, the differences between the correlates of life satisfaction and self-esteem across

nations are all the more impressive because the participants were all students. Because students are likely to share many attributes and life circumstances across even very different nations, the differences in correlations between various nations is more likely to be due to differences in culture.

There were several unexpected findings in the present research that present interesting directions for additional study. The relation between family satisfaction and life satisfaction was not moderated by collectivism. Further conceptual and empirical examination of the issue seems warranted. The stronger relation between friendship satisfaction and life satisfaction in individualistic cultures was the opposite of our prediction. Post hoc explanations for this finding are certainly possible. For example, it is possible that friends are more important in individualistic cultures because they are chosen rather than imposed. Another possible explanation is that people define "friends" more narrowly in individualistic cultures, so these individuals are quite important to one's life satisfaction.

References

- Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: America's perception of life quality*. New York: Plenum Press.
- Campbell, A. (1981). *The sense of well-being in America: Recent patterns and trends*. New York: McGraw-Hill.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life*. New York: Russell Sage Foundation.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Diener, E., & Diener, C. (1993). *Most people in the United States are happy and satisfied*. Unpublished manuscript.
- Diener, E., Diener, M., & Diener, C. (1994). *Factors predicting the subjective well-being of nations*. Manuscript submitted for publication.
- Diener, E., & Fujita, F. (in press). Resources, personal strivings, and subjective well-being: A nomothetic and idiographic approach. *Journal of Personality and Social Psychology*.
- Diener, E., & Larsen, R. J. (1993). The experience of emotional well-being. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 405-415). New York: Guilford Press.
- Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute? *Social Indicators Research*, 28, 195-223.
- Diener, E., Suh, E., Smith, H., & Shao, L. (in press). National and cultural differences in reported subjective well-being: Why do they occur? *Social Indicators Research*.
- Estes, R. J. (1986, September). *Trends in global social development, 1970-1986*. Paper presented at the Global Development Conference, College Park, MD.
- Fujita, F., Diener, E., & Sandvik, E. (1991). Gender differences in negative affect and well-being: The case for emotional intensity. *Journal of Personality and Social Psychology*, 61, 427-434.
- Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. San Diego, CA: Academic Press.
- Herzog, A. R., Rodgers, W. L., & Woodworth, J. (1982). *Subjective well-being among different age groups*. Ann Arbor: University of Michigan Institute for Social Research.
- Hoffman, M. S. (1991). *The world almanac and book of facts: 1992*. New York: Pharos Books.
- Hofstede, G. (1980). *Culture's consequences*. Beverly Hills, CA: Sage.
- Kitayama, S., & Markus, H. R. (in press). Construal of the self as cultural frame: Implications for internationalizing psychology. In H. K. Jacobsen (Ed.), *Internationalization and higher education*.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Row.
- McNemar, Q. (1969). *Psychological statistics*. New York: Wiley.
- Michalos, A. C. (1991). *Global report on student well-being*. New York: Springer-Verlag.
- Singer, J. L. (1984). *The human personality*. San Diego: Harcourt Brace Jovanovich.
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 96, 506-520.
- Veenhoven, R. (1991). Is happiness relative? *Social Indicators Research*, 24, 1-34.

Received February 16, 1993

Revision received May 6, 1994

Accepted September 27, 1994 ■