# Independent and Interdependent Conceptions of Self: An Investigation of Age, Gender, and Culture Differences in Importance and Satisfaction Ratings

**David Watkins**
*University of Hong Kong*

**Shahrenaz Mortazavi**
*Shahid Beheshti University*

**Irina Trofimova**
*McMaster University*

*Measures of the importance of and self-satisfaction with the independent and interdependent self were used to test age, gender, and culture differences in the nature of self-conception. The participants were 903 first- or second-year college undergraduates and 936 middle-class adults from four countries differing markedly in religious, political, and cultural dimensions: Hong Kong, Iran, Russia, and the United States. In both college and adult samples from all four countries, the Interdependent self was rated more important and a greater source of satisfaction than the Independent self. Analyses of variance indicated substantial main effects for age*

Cross-Cultural Research, Vol. 34 No. 2, May 2000 113-134

*and country but a very modest gender effect. However, the interaction effects were also substantial. The data were interpreted as casting doubt on explanations of the nature of self-conception in terms of a single cultural dimension, such as Individualism-Collectivism or gender. The danger of generalizing about a country from a single group, such as college students, was also evident, as within-country differences were consistently found for the adult and student samples.*

Self-concept is one of the central concepts of personality, social, clinical, and educational psychology (Hattie, 1992; Hayes, 1993). The Western individualistic view of the self emerged with modern Western philosophical thought (Hattie, 1992). It was described by Walsh and Banaji (1997) as the belief that individuality is a function of personal choices that individuals freely make and that it expresses a strong sense of uniqueness. Andersen, Reznik, and Chen (1997) portrayed the independent individualistic self-concept as related to "the need for detachment from others in the form of individual autonomy and personal freedom" (p. 249).

The generalizability of this view of self to non-Western cultures has been strongly questioned in recent years. Rather, it has been proposed that individuals raised in non-Western cultures are likely to espouse a more group-oriented, connected view of the self, with an emphasis on harmony, family orientation, and close personal relationships (Markus & Kitayama, 1991; Triandis, 1989). These two articles have been very influential in the literature of both cross-cultural and mainstream psychology (Bond, 1996). We would argue that their strength is in describing differences that might arise between individuals with independent or interdependent self-conceptions in terms of basic psychological processes of cognition, motivation, and emotion. However, it is the claim that such differences in self-conception are characteristic of Western and non-Western cultures and reflect an underlying cultural

Authors' Note: *An earlier version of this article was presented at the 14th Congress of the International Association for Cross-Cultural Psychology, Western Washington University, Bellingham, United States, August 3-8, 1998. The authors would like to thank Alan Tam, Chris Cheng, Jim Fleming, and Kent Lefner for their assistance in collecting the data reported in this article. Correspondence should be sent to the first author at the Department of Education, University of Hong Kong, Pokfulam Road, Hong Kong (e-mail: HRFEWDA@HKUCC.HKU.HK).*



dimension of Individualism-Collectivism that has been seized on uncritically by too many researchers and textbook writers, according to Bond (1996) and Schwartz (1994).

Markus and Kitayama's empirical support comes from several small studies of U.S. and Japanese college students, which are described in little detail. Triandis supported his claims with several small studies of university students in a number of cultures, where he asked each subject to complete 20 sentences, each beginning "I am. . . " (referred to as the Twenty Statements Test or TST; Kuhn & McPartland, 1954). Further support came from the work of Cousins (1989), also using both the original and a modified version of the TST with American and Japanese high school and college subjects. However, Cousins warned that the Japanese were more used to thinking about themselves within specific social contexts, so the original TST, which required them to describe a decontextualized self, was an artifical task for them.

A number of studies have concluded that respondents from the United States tend to provide self-descriptions that are qualitatively different from those of respondents from either China, India, or Japan (Bond & Cheung, 1983; Dhawan, Roseman, Naidu, Thapa, & Rettek, 1995; Ip & Bond, 1995; Schweder & Bourne, 1982). Moreover, recent in-depth indigenous studies of self-conceptions have provided rather different models of self than those developed in Western research (e.g., Enriquez, 1993, with Filipinos; Hsu, 1985, with Chinese; Mpofu, 1994, with Zimbabweans; Yamaguchi, 1994, with Japanese). These investigations have been relatively consistent in finding that non-Western subjects were more likely to report possessing a relational, collectivist, or interdependent self-conception, which contrasted with the idiocentric, independent, or individualistic self typically reported by Western (or at least American) subjects.

In recent years, the cultural dimension of individualism-collectivism has been seized on as an explanatory variable for cross-cultural differences in many variables including self-conception. This dimension was used by Hofstede (1980, 1983) to describe a continuum from individualism, where people are considered distinct units clearly separable from their social context, to collectivism, where people think of themselves not so much as separate entities but rather as members of the groups to which they belong. Hofstede compared survey data from samples of IBM employees to construct an index of individualism-collectivism and

three other dimensions: power/distance, uncertainty/avoidance, and masculinity/femininity for 50 countries and three multicountry regions.

However, the empirical back-up for a cultural level individualism-collectivism explanation of cross-cultural differences in the nature of self-concept is still rather limited. As discussed above, much of the support to date comes from two-country etic-type research (typically America versus India, China, or Japan) or by contrasting findings from an emic study of the self in a non-Western society with Western models of self. Cross-cultural methodologists have warned against making false generalizations about cultural dimensions without conducting at least a four-culture study (Bond, 1994; Schwartz, 1994).

There have been two 3-culture and two larger studies prior to the research program of which this investigation is part. In the former category, Bochner (1994) found that, as hypothesized, adults from Malaysia (a collectivist culture) gave more group and fewer idiocentric self-descriptions to the TST than did subjects from the individualist cultures of Australia and Britain, and the differences were statistically significant. A second 3-culture study cast doubt on the validity of a simple individualism-collectivism self-concept relationship. Bond and Cheung (1983) reported a clear pattern of findings with their university student samples, with very similar responses by their individualist (United States) and one of the collectivist samples (Hong Kong Chinese), but their other collectivist sample (Japan) was very different. In a larger study, Triandis, McCusker, and Hui (1990) analyzed the spontaneous self-conceptions of Illinois, Greek, Hawaiian (of both European and Asian background), Hong Kong, and Chinese psychology college students to the TST. They found that the percentage of the subjects' responses that were linked to a social entity increased as expected by the supposed degree of collectivism of the cultural group to which they belonged. However, three of the groups sampled were American, and participants were undergraduate college students (except for those in the People's Republic of China sample, which was not only small in number but also consisted of older graduate students). Moreover, possible gender differences in the relationship between the individualism-collectivism dimension and the self-concept were not considered. Results of the other larger study referred to above and the first three investigations in this research program, which are all discussed below, suggest that this may be a serious weakness.



## GENDER AND THE SELF

Research into gender differences and the self-concept has focused primarily on possible structural and mean differences in self-esteem. Confirmatory factor analytic research has indicated that, at least for North American adolescents, a structural model based on the hierarchical, multifaceted model of self proposed by Shavelson, Hubner, and Stanton (1976) was appropriate for both genders (Byrne, Shavelson, & Marsh, 1992). Moreover, contrary to popular stereotypes, a meta-analysis concluded that there was little empirical evidence of gender differences in overall self-esteem, but differences existed at lower levels of the hierarchy, with males tending to report higher mathematics self-esteem but lower verbal self-esteem than females (Hattie, 1992).

However, Josephs, Markus, and Tafarodi (1992) pointed out that little attention has been paid in such research to the basis of self-esteem. They argued that self-esteem is related at least in part to how well men or women feel they have satisfied culturally mandated norms, which differ according to gender. For women, sensitivity, nurturance, and interdependence are typically expected, whereas for men, independence, autonomy, and superiority to others are often expected. Josephs et al. (1992) proposed that men are more likely to have self-conceptions based on individualist, independent self-cognitions, whereas women's self-conceptions are more likely to be based on the notion of a collectivist, interdependent self. Josephs et al. justified their claims, which have since been supported by a review by Cross and Madson (1997), using data from three small studies of American college students of psychology. But would such hypotheses be confirmed in other cultures?

Contrary evidence was provided by Luk and Bond (1992), who concluded that their sample of Hong Kong male and female university students based their self-esteem on the same dimensions of self-concept. Moreover, Kashima and colleagues (1995) concluded, based on a study of about 1,000 introductory psychology students from two supposedly individualist cultures (Australia and mainland United States), two thought to be collectivist (Korea and Japan), and one in-between culture (Hawaii), that gender differences in self-concept were primarily due to differences in the extent to which their respondents thought of themselves as emotionally related to others. However, such differences between cultures were primarily due to differences in the degree to which their respondents saw themselves as acting as independent agents.

Further evidence that gender differences in the nature of self-concept may not be consistent across cultures came from the first three investigations in this research program. The first used the Adult Sources of Self-Esteem Inventory (ASSEI; Elovson & Fleming, 1988) to investigate the basis of self-concept of 609 middle-class adults from Lithuania, Hong Kong, and the United States (Watkins, Yau, Fleming, et al., 1997). Gender differences in the salience of self-components were minimal within each of the three countries. The second study used the TST to explore the self-conceptions of 1,580 social science undergraduates from four individualist and five collectivist cultures (Watkins, Adair, Akande, Gerong, et al., 1998). It was concluded that a cultural dimension such as individualism and collectivism may not be adequate for explaining cultural differences in self-construal. Moreover, although allocentric or relational self-descriptions were significantly more often provided by females from the four individualist cultures, two of the five collectivist cultures showed the opposite tendency. The third study (Watkins, Adair, Akande, Cheng, et al., 1998) was based on the responses to ASSEI by university students from 14 countries (the U.S. and Hong Kong student and adult data referred to above were also used in this study). It was found that respondents from the 10 collectivist cultures sampled rated family values but not social relationships as more important to their self-conceptions than did their peers from individualist countries. However, the hypotheses that females would consider these above two aspects of the self as more important than the male participants were supported only for individualist countries. It was concluded that it is important to consider separately family and social aspects of the interdependent self and that there may well be a strong cultural interaction effect between gender and the dimension of individualism-collectivism. It will take further research to determine to what extent these conflicting findings are due to measurement or sampling issues. However, they do challenge both the claims by Triandis (1989) and Markus and Kitayama (1991) regarding the role of the individualism-collectivism dimension and Josephs et al.'s (1992) findings regarding the role of gender for self-conception in at least non-Western cultures.

## EXPLORING THE SELF-CONCEPT

The TST has been the primary tool used to date to probe possible gender and culture differences in the nature of self-concept.



However, analysis of responses to the TST is relatively subjective, and research findings in this area may be instrument-dependent. Moreover, the components of self-concept in men and women and in different cultures may well vary more in terms of salience rather than kind. Thus, a measuring instrument is required that will allow exploration of the salience of possible self-components. ASSEI was designed to fulfill this function. This instrument contains two sections with 20 identical items. The first section asks subjects to identify how important each item is to their self-esteem whereas the second section asks them to rate how satisfied they are with that aspect of themselves (Markus & Kitayama, 1991, have argued that, in a cross-cultural setting, self-esteem is more appropriately seen as self-satisfaction rather than in self-enhancement terms).

ASSEI has the advantage over measures such as the TST of being objective in measurement but also allowing for individual differences in self-construal. However, it could be argued that the 20 items of ASSEI, although carefully selected to include a wide range of possible self-concept aspects throughout the adult life span, may still not consider relatively unusual aspects of the self-concept valued by individual subjects or aspects not salient to American society where ASSEI was developed. Therefore, pilot studies were conducted to explore the bases of self-esteem of students and adults in Australia, Hong Kong, Nepal, New Zealand, Nigeria, and the Philippines. These studies supported the appropriateness of the ASSEI items in a range of cultures. For example, Tam and Watkins (1995) content-analyzed the responses (in Chinese) of 281 Hong Kong adults averaging 30 years of age to the open-ended question, "What areas of your life are important to you?" and found most of the ASSEI items did reflect the life areas reported by these respondents. Of course, it is most unlikely that precisely the same 20 items would be the most salient for individuals within the same culture, let alone across cultures. The aim of ASSEI was to include a range of life areas likely to include the most salient areas for as many adults as possible, whatever their culture, age, gender, or religion.

For a U.S. sample, the ASSEI Importance and Satisfaction items were found to have median test-retest reliabilities over a 2-week period of 0.69 and 0.67, respectively: quite impressive for single items (Davis-Zinner, 1990). The overall unweighted self-satisfaction total score was found to have an excellent internal consistency coefficient alpha of 0.97 for Turkish students (Inelmen,

1996). ASSEI total satisfaction scores, unweighted and weighted for importance, respectively, were also found in this previous research to correlate as predicted—moderately highly (0.37 and 0.52)—with the Rosenberg (1965) Self-Esteem Scale and negatively (–0.14 and –0.37) with the Neuroticism scale of the Eysenck Personality Questionnaire. As expected, social desirability as measured by the Marlowe-Crowne scale had only a minor influence on these ASSEI satisfaction scores (a correlation of 0.23). Further cross-cultural validity evidence comes from a study of 139 Turkish university students (Inelmen, 1996), which found correlations of 0.65 and 0.55 between the ASSEI satisfaction scores and general self-esteem as measured by the Coopersmith Self-Esteem Inventory and from a Swedish study (Watkins, Yau, Dahlin, & Wondimu, 1997) that found a correlation of 0.45 with self-esteem as assessed by the TST (all correlations are significant at the 0.01 level).

Independent qualitative pilot studies for this research conducted in Hong Kong and Turkey, supported by factor analyses of responses to ASSEI items from more than 20 countries, have shown that responses to ASSEI can be classified into two subcomponents of the self: the independent self and the interdependent self. Internal consistency reliabilities for both importance and satisfaction ratings of these subcomponents have consistently proved to exceed .80 in more than 20 countries (and in all samples in this research). We were well aware that possible response-set differences may challenge the metric equivalence of responses to ASSEI and thus invalidate analyses based on comparison of raw scores across countries. However, further pilot analyses for this research and re-analyses of the ASSEI data reported by Watkins et al. (Watkins, Adair, Akande, Cheng, et al., 1998; Watkins, Yau, Fleming, et al., 1997) showed virtually no difference between such analyses, whether of raw, standardized, or ranked data. Therefore, for the sake of simplicity, analyses of the raw data are reported here.

## RESEARCH QUESTIONS

This research used ASSEI to survey the importance and satisfaction ratings of independent and interdependent components of self in a sample of college students and middle-class adults from four different countries. The aim of this research was to investigate culture, age, and gender differences in these responses.



More specifically, this study reports an investigation of how the importance and evaluative components of independent and interdependent self-conceptions vary according to factors such as the age, gender, and cultural background of respondents from four very different countries: America, Hong Kong, Iran, and Russia. American society is considered to be the quintessential individualist society, and not surprisingly, the United States provided the highest score on the individualism dimension in the 50 countries and three regions considered by Hofstede (1983). Hong Kong and Iran were ranked 34th and 23rd, respectively, by Hofstede; along with Russia, they are traditionally considered to be collectivist in nature (Triandis, 1995). However, the rapid economic, political, and social changes in all three of these societies suggest that the younger generation is likely to be more individualistic in nature than older generations (Triandis, 1995). Our older repondents are also more likely to have greater family responsibilities and thus to consider at least some aspects of the interdependent self as more important than their younger peers.

In particular, the following principal questions were posed:

1. Do importance ratings of the independent and interdependent self vary with the age of respondents?
2. Do satisfaction ratings of the independent and interdependent self vary with the age of respondents?
3. Do importance ratings of the independent and interdependent self vary with the gender of respondents?
4. Do satisfaction ratings of the independent and interdependent self vary with the gender of respondents?
5. Do importance ratings of the independent and interdependent self vary with the cultural background of respondents?
6. Do satisfaction ratings of the independent and interdependent self vary with the cultural background of respondents?
7. Are there any interaction effects in the above relationships?

Although it is difficult to make firm predictions in all cases, clearly, some hypotheses can be based on the propositions of Markus and Kitayama (1991) and Triandis (1989) regarding cultural dimensions, on a generalization of the reviews of Josephs et al. (1992) and Cross and Madson (1997) for gender differences, and on our previ-

ous discussion of likely age differences. Thus, we would predict that independent self-conceptions are more likely to be rated of importance by our one clearly individualist country sample, the United States, than by our three relatively collectivist countries, Hong Kong, Iran, and Russia, for both adult and college students and for both sexes. Similarly, we would expect such conceptions to be rated more important by males than females and by younger respondents within each country. It is harder to predict factors influencing satisfaction ratings, as it may well be that because of greater pressure to conform to cultural values, less satisfaction may accompany higher importance ratings of interdependent components of self such as family relationships. However, we would predict that generally higher satisfaction ratings would be provided by the U.S. respondents, as Westerners are likely to have a greater tendency toward self-enhancement than non-Western subjects (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997).

## METHOD

### THE INSTRUMENT

ASSEI is a 20-item inventory that asks each respondent to rate on a 1 = *very low* to 10 = *very high* scale the importance for him- or herself of different aspects of a person's self-concept such as the physical, social, ethical, familial, and intellectual, as well as satisfaction with these aspects (see Appendix). For the Hong Kong, Iranian, and Russian respondents, each item was translated into the local language by teams of bilingual social scientists using the approved translation/back-translation method (Brislin, 1986). The items tapping the independent and interdependent self are shown in the Appendix.

### PARTICIPANTS

The participants were 1,839 urban adults and college students from Hong Kong, Iran, Russia, and the United States. Of these, 903 were first- or second-year college students averaging 20 years of age (Hong Kong, 175 males and 183 females; Iran, 70 males and 45 females; Russia, 52 males and 51 females; and the United States, 166 males and 161 females) and 936 were middle-class adults averaging 34 years of age (Hong Kong, 58 males and 88 females; Iran, 101 males and 80 females; Russia, 120 males and 96 females; and the United States, 201 males and 192 females). In each country, the adult sample was obtained in a different way but with the same common aim: to get a reasonably representative sample of middle-class urban adults, typical of the source of tertiary students in that country. For example, in Hong Kong, the sample was chosen at random from the electoral roll, whereas in the United States, people were randomly sampled in urban hospital, railway, and airport waiting rooms. The Hong Kong and U.S. respondents come from samples reported in earlier research (Watkins, Adair, Akande, Cheng, et al., 1998; Watkins, Yau, Fleming, et al., 1997), whereas the Iranian and Russian data are previously unpublished.



### ANALYSIS

The responses to ASSEI were subjected to a series of two-way Analyses of Variance: Country × Gender, Country × Age, and Age × Gender. Unfortunately, as only summary statistics were still available for the Hong Kong and U.S. samples, three-way ANOVA was not possible.

## RESULTS

The means and standard deviations of the importance and satisfaction ratings of the independent and interdependent self are shown in Table 1 for age, gender, and country groups. As can be seen, both components of self were considered fairly important by all groups (the means being well above the importance scale midpoint of 55.0 in all cases), with the interdependent self being rated the more important by all groupings. Satisfaction with those components of the self was skewed toward the positive end in most cases, and it was the interdependent self that evoked the higher satisfaction ratings. The data were subjected to a number of two-way ANOVAs, which are summarized in Tables 2 and 3.

It can be seen that for the university student samples, not only were all the Country and Country × Gender effects for both importance and satisfaction ratings statistically significant but the

**TABLE 1**
**Means and Standard Deviations (in Parentheses) of Importance and Satisfaction Independent and Interdependent Self Ratings by Country, Gender, and Age Groupings**

| | *Importance Rating* | | *Satisfaction Rating* | |
|---|---|---|---|---|
| | *Independent Self* | *Interdependent Self* | *Independent Self* | *Interdependent Self* |
| University students | | | | |
| Hong Kong males | 67.15 (12.08) | 72.02 (10.64) | 56.10 (11.72) | 63.21 (10.64) |
| Hong Kong females | 67.09 (10.06) | 74.76 (9.43) | 55.16 (11.75) | 65.19 (11.02) |
| Iranian males | 74.90 (11.61) | 80.80 (9.96) | 68.20 (11.80) | 75.02 (9.96) |
| Iranian females | 77.55 (12.74) | 82.93 (11.71) | 67.19 (14.04) | 73.91 (11.64) |
| Russian males | 67.54 (13.35) | 69.60 (13.01) | 57.16 (12.95) | 65.37 (12.41) |
| Russian females | 70.39 (15.53) | 74.84 (10.89) | 64.88 (14.47) | 72.06 (12.96) |
| U.S. males | 69.19 (12.34) | 80.23 (11.20) | 61.88 (12.15) | 72.47 (11.81) |
| U.S. females | 74.28 (12.77) | 85.33 (10.67) | 63.80 (13.42) | 77.29 (11.87) |
| Adults | | | | |
| Hong Kong males | 62.11 (12.22) | 78.99 (11.39) | 53.39 (12.95) | 70.72 (12.84) |
| Hong Kong females | 67.75 (13.92) | 81.57 (12.99) | 58.92 (14.64) | 74.03 (12.89) |
| Iranian males | 71.48 (13.79) | 80.27 (10.18) | 65.03 (12.36) | 74.90 (12.91) |
| Iranian females | 72.90 (17.00) | 79.85 (16.27) | 62.60 (14.19) | 77.49 (11.79) |
| Russian males | 74.48 (12.50) | 75.84 (13.61) | 62.39 (13.42) | 68.18 (13.27) |
| Russian females | 75.57 (13.07) | 77.11 (13.50) | 62.39 (14.76) | 68.28 (13.82) |
| U.S. males | 78.64 (10.38) | 80.42 (10.38) | 67.59 (13.07) | 72.09 (12.35) |
| U.S. females | 77.96 (11.70) | 83.78 (9.21) | 67.24 (14.95) | 76.43 (13.08) |

effect sizes were sizable in most cases. The Gender effects were less evident, especially for the independent self.

Inspection of the means in Table 1 shows that the Iranian students tended to rate both components of self as somewhat more important than their peers from both Hong Kong and Russia. Surprisingly, the U.S. students not only tended to rate the importance of their interdependent self on a par with the Iranians, but the former also rated the independent self as less important than the Iranians did. There was a tendency for females, except those from Hong Kong, to rate both components of self as more important than did their male peers.

The Hong Kong students tended to report less satisfaction with both components of self than did their peers from the other three countries. The Russian and, to a lesser extent, the American females reported greater self-satisfaction with both self components than did their male peers.



**TABLE 2**
**Summary *F* Statistics for Country × Gender ANOVA of Importance and Satisfaction Ratings of Independent and Interdependent Self for Student and Adult Respondents (Effect Sizes in Parentheses)**

| | *Importance Rating* | | *Satisfaction Rating* | |
|---|---|---|---|---|
| *Effect* | *Independent Self* | *Interdependent Self* | *Independent Self* | *Interdependent Self* |
| Students | | | | |
| Country (3,895 df) | 17.97* (0.24) | 57.12* (0.40) | 34.83* (0.32) | 53.97* (0.39) |
| Gender (1,895 df) | 6.50 (0.08) | 23.32* (0.16) | 0.45 (0.02) | 12.42* (0.12) |
| Country × Gender (3,895 df) | 23.58* (0.27) | 67.61* (0.43) | 38.95* (0.34) | 62.32* (0.42) |
| Adults | | | | |
| Country (3,928 df) | 37.98* (0.33) | 10.55* (0.18) | 22.15* (0.26) | 14.34* (0.21) |
| Gender (1,928 df) | 0.36 (0.02) | 7.90* (0.09) | 0.07 (0.01) | 11.75* (0.11) |
| Country × Gender (3,928 df) | 40.67* (0.34) | 13.92* (0.21) | 24.46* (0.27) | 19.39* (0.24) |

*indicates *F* statistic is significant at .01 level.

For the adult samples, a similar pattern of ANOVA results was found. Inspection of the means in Table 1 shows the Hong Kong respondents placed less importance on their independent self than did their peers elsewhere, particularly the Americans. Moreover, the Hong Kongers also reported that their independent self was far less important than their interdependent self. This tendency was also clear for the Iranian adults but was shown to a much lesser extent by the U.S. and particularly the Russian samples. Among all but the Iranian adults, the females tended to rate their interdependent self as more important than did their male counterparts. Once again, it was the Hong Kongers who rated their satisfaction with their independent self well below the means of the adults from the other countries. This country difference was less evident for the interdependent self component; it was the Russians who were least satisfied with the latter. Gender differences were not consistent across countries, with the females from Hong Kong but the males from Iran showing the greater satisfaction with the independent self. However, it was the females, except those from Russia, who reported the greater satisfaction with their interdependent self component.

**TABLE 3**
**Summary *F* Statistics for Age × Gender and Country × Age ANOVA of Importance and Satisfaction Ratings of Independent and Interdependent Self (Effect Sizes in Parentheses)**

| | *Importance Rating* | | *Satisfaction Rating* | |
|---|---|---|---|---|
| *Effect* | *Independent Self* | *Interdependent Self* | *Independent Self* | *Interdependent Self* |
| Age (1,1835 df) | 48.03* (0.16) | 19.21* (0.10) | 29.71* (0.13) | 155.68* (0.28) |
| Gender (1,1835 df) | 4.36 (0.05) | 25.55* (0.12) | 0.06 (0.01) | 133.13* (0.26) |
| Age × Gender (1,1835 df) | 54.05* (0.17) | 46.06* (0.16) | 30.15* (0.13) | 288.94* (0.37) |
| Country (3,1831 df) | 49.09* (0.27) | 51.45* (0.28) | 56.45* (0.29) | 55.83* (0.29) |
| Age (1,1831 df) | 52.17* (0.17) | 20.80* (0.11) | 32.33* (0.13) | 27.64* (0.12) |
| Country × Age (3,1831 df) | 73.64* (0.33) | 68.62* (0.32) | 66.01* (0.31) | 72.43* (0.33) |

*indicates *F* statistic is significant at .01 level

From Table 3, it can be seen that significant main effects and interactions were found for all but the Gender effect on importance and satisfaction means for the independent self. From inspection of Table 1, it seems that in America, contrary to predictions, the older respondents tended to rate the independent self as more important than did the college students. The opposite, predicted trend was found for both the Hong Kong and Iranian samples. The Russian adults tended to rate both components of self as more important than Russian college students.

For the satisfaction ratings, the U.S. and Hong Kong adults tended to report greater satisfaction with their independent and interdependent selves, respectively. In the Russian sample, the adult males tended to be more satisfied with their independent self than the college males, but among females, it was the students who expressed the greater satisfaction with their interdependent self.

## DISCUSSION

These results once again indicate that, as concluded by Watkins et al. (Watkins, Adair, Akande, Cheng, et al., 1998; Watkins, Adair, Akande, Gerong, et al., 1998; Watkins, Yau, Fleming, et al., 1997), it may be dangerous to interpret differences in the nature of self-conception in terms of generalizable characteristics such as age, gender, and cultural dimensions. Although gender differences were modest, age and country main effects were found to be substantial (effect sizes around .30), as were the interactions among all three of these variables.



Although only one clearly individualist country was included in this study, these findings do at least question any straightforward link between individualism-collectivism and the nature of self-construal, as claimed by Markus and Kitayama (1991) and Triandis (1989). Some of these findings may be due to the datedness of Hofstede's findings. Countries such as Iran and Hong Kong have undergone massive modernization since the early 1980s and may no longer be collectivist in nature. Russia, on the other hand, has slipped from a major superpower to a struggling economy. In both the former countries, age differences were clear, and this makes it difficult to infer any cultural interpretation of self-construal. The younger respondents placed more salience on the independent self than did their older countrymen. However, the opposite trend was found for the U.S. respondents. Thus, our data did not provide cross-cultural support for the claim of Triandis (1995) that younger generations tend to be more individualistic than older generations. Rather, the trend may be for different generations within a culture to have different self-conception tendencies. The data may also well indicate that as cultural encounters and intercommunications increase, cross-cultural differences in the nature of self-conception may decrease over generations.

Gender differences in importance ratings were stronger for the interdependent than the independent self. In addition, in three countries, the females were more likely to consider the interdependent aspect of their self as more salient than did the males, as Josephs et al. (1992) and Cross and Madson (1997) would predict. However, the generalizability of this trend was questioned by the responses of the Iranian adults.

There was also a clear trend for respondents to rate aspects of the interdependent self as more important and as greater sources of self-satisfaction than aspects of the independent self. This was particularly true for the Hong Kong respondents. As most current measures of self-esteem tap the independent rather than the interdependent self, comparisons of Asian and Western respondents' self-esteem may underestimate the former and not be true

indicators of self-esteem, even for the latter. Consistent with the view of Kitayama et al. (1997), the individualistic U.S. adult and student respondents did tend to report greater self-satisfaction than the East Asian collectivistic counterparts sampled here. However, this tendency was not found with the also supposedly collectivistic Iranians. Once again, this finding points to the danger of generalizing findings on self-enhancement in terms of the individualism-collectivism dimension.

It is also interesting to note that in each of the 32 instances in Table 1, the mean of the importance rating exceeded that of the corresponding satisfaction rating. Such differences may be worthy of further analysis, as they have been interpreted by Harter (1985) in terms of an "ideal self/actual self" discrepancy. However, such an interpretation depends on several assumptions, including that such importance/satisfaction ratings are measured on the same metric. This latter assumption is, in these writers' opinion, a very dubious one. Rather, we would suggest that the correlation between the importance/satisfaction ratings (at individual, gender, and culture levels) may have the greater psychological significance, being related to the self-enhancement strategy of compensation (Hattie, 1992). We are currently using the ASSEI data to test whether there are cross-cultural differences in the use of this strategy.

Finally, it should be emphasized that the current research is the only study we are aware of that has compared the basis of self-esteem of adult and college students from different countries. Clear generational differences were found in all four countries. This once again highlights the dangers of generalizing findings based on college students to other members of a society and inferring cross-cultural dimensions based on any one section of such societies.



## APPENDIX

### IMPORTANCE ITEMS OF THE ADULT SOURCES OF SELF-ESTEEM INVENTORY (ASSEI)

Using a scale of 0 to 10 where:

0 = "of no importance" 10 = "extremely important"

Please indicate how IMPORTANT to your self-esteem is your:

*1. Looks and physical attractiveness:
0 1 2 3 4 5 6 7 8 9 10

*2. Physical condition, strength, and agility:
0 1 2 3 4 5 6 7 8 9 10

*3. Grooming, clothing, overall appearance:
0 1 2 3 4 5 6 7 8 9 10

4. Being liked by others, your popularity and ability to get along, your social skills:
0 1 2 3 4 5 6 7 8 9 10

5. Being a good person, your friendliness and helpfulness to others:
0 1 2 3 4 5 6 7 8 9 10

6. Having a loving, close relationship with someone:
0 1 2 3 4 5 6 7 8 9 10

7. Being a law abiding, responsible citizen:
0 1 2 3 4 5 6 7 8 9 10

8. Being an honest and truthful person in your dealings with others:
0 1 2 3 4 5 6 7 8 9 10

9. Having the courage of your convictions, speaking up for what you think is right, even when it is not popular to do so:
0 1 2 3 4 5 6 7 8 9 10

10. Relationship with your family, being on good terms with your family, having good feelings for each other:
0 1 2 3 4 5 6 7 8 9 10

11. Meeting or have met your responsibilities to your family, i.e., being a good parent, spouse, son, or daughter:
0 1 2 3 4 5 6 7 8 9 10

*12. Intelligence, how smart you are:
0 1 2 3 4 5 6 7 8 9 10

*13. Level of academic accomplishments, years of education:
0 1 2 3 4 5 6 7 8 9 10

*14. Being a cultured and knowledgeable person, knowing about art, music, and world events:
0 1 2 3 4 5 6 7 8 9 10

*(continued)*

## REFERENCES


Andersen, S. M., Reznik, I., & Chen, S. (1997). The self in relation to others: Cognitive and motivational underpinnings. In J. G. Snodgrass & R. L. Thompson (Eds.), *The self across psychology* (pp. 233-275). New York: New York Academy of Sciences.

Bochner, S. (1994). Cross-cultural differences in the self-concept: A test of Hofstede's individualism/collectivism distinction. *Journal of Cross-Cultural Psychology, 25*, 273-283.

Bond, M. H. (1994). Into the heart of collectivism: A personal and scientific journey. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism*. Newbury Park, CA: Sage.

Bond, M. H. (1996). *Social psychology across cultures: Two ways forward*. Keynote address at the 26th International Congress of Psychology, Montreal, Canada.

Bond, M. H., & Cheung, T.-S. (1983). College students' spontaneous self-concept: The effect of culture among respondents in Hong Kong, Japan, and the United States. *Journal of Cross-Cultural Psychology, 14*, 153-171.

Brislin, R. W. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), *Field methods in cross-cultural research* (pp.137-164). Beverly Hills, CA: Sage.

Byrne, B., Shavelson, R. J., & Marsh, H. W. (1992). Multigroup comparisons in self-concept research. In T. M. Brinthaupt & R. P. Lipka (Eds.), *The self: Definitional and methodological issues*. New York: State University of New York Press.

Cousins, S. D. (1989). Culture and self-perception in Japan and the United States. *Journal of Personality and Social Psychology, 56*, 124-131.

Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin, 722*, 5-37.

Davis-Zinner, N. (1990). *Source differences in male and female self-esteem*. Unpublished Ph.D. thesis, California School of Professional Psychology, Los Angeles.

Dhawan, N., Roseman, I. J., Naidu, R. K., Thapa, K., & Rettek, S. I. (1995). Self-concepts across two cultures; India and the United States. *Journal of Cross-Cultural Psychology, 26*, 606-621.

Elovson, A. C., & Fleming, J. S. (1988). *Rationale for multidimensional self-esteem scale scoring and weighting*. Unpublished manuscript, California State University.

Enriquez, V. (1993). Developing a Filipino psychology. In U. Kim & J. W. Berry (Eds.), *Indigenous psychologies*. Newbury Park, CA: Sage.

Harter, S. (1985). *Manual for the Self-Perception Profile for Children*. Denver, CO: University of Denver.

Hattie, J. (1992). *Self-concept*. Hillsdale, NJ: Lawrence Erlbaum.

Hayes, N. (1993). *Principles of social psychology*. Hillsdale, NJ: Lawrence Erlbaum.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.





Hofstede, G. (1983). Dimensions of national cultures in fifty countries and three regions. In J. B. Deregowski, S. Dziurawiec, & R. C. Annis (Eds.), *Expiscations in cross-cultural psychology* (pp. 335-355). Lisse, Netherlands: Swets & Zeitlinger.

Hsu, F.L.K. (1985). The self in cross-cultural perspective. In A. J. Marsella, G. de Vos, & F.L.K. Hsu (Eds.), *Culture and self*. London: Tavistock.

Inelmen, K. (1996). *Relationship of sex-role orientation to two measures of self-esteem*. Unpublished MA thesis, Bogazici University.

Ip, G.W.M., & Bond, M. H. (1995). Culture, values, and the spontaneous self-concept. *Asian Journal of Psychology, 1*, 29-35.

Josephs, R. A., Markus, H. R., & Tafarodi, R. W. (1992). Gender and self-esteem. *Journal of Personality and Social Psychology, 63*, 391-402.

Kashima, Y., Yamaguchi, S., Kim, U., Choi, S. C., Gelfand, M. J., & Yuki, M. (1995). Culture, gender, and self: A perspective from individualism-collectivism research. *Journal of Personality and Social Psychology, 69*, 925-937.

Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology, 72*, 1245-1267.

Kuhn, M. H., & McPartland, T. S. (1954). An empirical investigation of self-attitudes. *American Sociological Review, 19*, 68-76.

Luk, C. L., & Bond, M. H. (1992). Explaining Chinese self-esteem in terms of the self-concept. *Psychologia, 35*, 147-154.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224-253.

Mpofu, E. (1994). Exploring the self-concept in an African culture. *Journal of Genetic Psychology, 155*, 341-354.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Schwartz, S. (1994). Beyond individualism/collectivism: New cultural dimensions of values. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism*. Newbury Park, CA: Sage.

Schweder, R. A., & Bourne, E. J. (1982). Does the concept of self vary cross-culturally? In A. J. Marsella & G. M. White (Eds.), *Cultural conceptions of mental health and therapy*. Dortrecht, The Netherlands: Reidel.

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research, 46*, 407-441.

Tam, A.S.F., & Watkins, D. (1995). Towards a hierarchical model of self-concept for Hong Kong Chinese adults with physical disabilities. *International Journal of Psychology, 30*, 1-17.

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*, 506-520.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.

Triandis, H. C., McCusker, C., & Hui, C. H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology, 59*, 1006-1020.

Walsh, W. A., & Banaji, M. R. (1997). The collective self. In J. Snodgrass & R. L. Thompson (Eds.), *The self across psychology* (pp. 193-214). New York: Annals of the New York Academy of Sciences. Vol. 818,

Watkins, D., Adair, J., Akande, A., Cheng, C., Fleming, J., Gerong, A., Ismail, M., McInerney, D., Lefner, K., Mpofu, E., Regmi, M., Singh-Sengupta, S., Watson, S., Wondimu, H., & Yu, J. (1998). Cultural dimensions, gender, and the nature of self-concept: A fourteen-country study. *International Journal of Psychology, 33*, 17-31.

Watkins, D., Adair, J., Akande, A., Gerong, A., McInerney, D., Sunar, D., Watson, S., Wen, Q., & Wondimu, H. (1998). Individualism-collectivism, gender, and the self-concept: A nine-culture investigation. *Psychologia, 41*, 259-271.

Watkins, D., Yau, J., Dahlin, B., & Wondimu, H. (1997). The Twenty Statements Test: Some measurement issues. *Journal of Cross-Cultural Psychology, 28*, 626-633.

Watkins, D., Yau, J., Fleming, J., Davis-Zinner, N., Tam, A., Juhasz, A., & Walker, A. (1997). Gender differences in the basis and level of adult self-esteem: A cross-cultural perspective. *Psychologia, 40*, 265-276.

Yamaguchi, S. (1994). Collectivism among the Japanese: A perspective from the self. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism*. Newbury Park, CA: Sage.

*David Watkins has taught in universities in Australia and New Zealand and is now a professor at the University of Hong Kong. He has published widely in the areas of self-conceptions, student learning, and conceptions of teaching in different cultures. His Ph.D. is from the Australian National University.*

*Shahrenaz Mortazavi is an assistant professor at the University of Shahid Beheshti in Teheran and is the author of four books in Farsi and several journal articles in English and Farsi on cross-cultural, environmental, educational, and management psychology. Her doctorate is from the Eberhard-Karls University, Tubingen, Germany.*

*Irina Trofimova is an administrator in the Laboratory of Collective Intelligence, McMaster University. She also teaches at Brock University and Maimonides College. She holds a Ph.D. from the Russian Academy of Science.*