Rethinking Culture and Self-Construal: China as a Middle Land

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ABSTRACT. Amid criticisms of current paper-and-pencil type questionnaires measuring self-construal across cultural groups, the authors used a graphic representation scale to examine whether Anglo Canadians ($N = 220$) were more independent than Mainland Chinese ($N = 196$) and Indians ($N = 212$) in construing their relationships with closest family member, family members, closest friend, friends, (other) relatives, colleagues, and neighbors. Data generated 5 intriguing findings: (a) Chinese were more interdependent than Canadians but less so than Indians, indicating that Chinese culture has become more individualistic. (b) Canadians were more independent than Chinese in 6 relationship dimensions but were as interdependent as Chinese in self–closest-friend connectedness, somewhat contradicting 1 assumption of theories of independent–interdependent self-construal and individualism–collectivism (I–C). (c) Canadians were more independent than Indians in all relationship dimensions, supporting theories of independent–interdependent self-construal and I–C. (d) Chinese were as interdependent as Indians in self–closest-family-member, self–close-family-members, and self–relatives connectedness but more independent than Indians in the other categories of self–other relationships. (e) Participants' age did not have strong correlations with variables measuring self-construal in any sample, indicating that a person's attachment style may not change greatly over a lifespan. The authors discussed theoretical and methodological implications.

Key words: comparing Asians and Canadians, cross-cultural studies, individualism–collectivism, self-construal, self–other relationships

INDEPENDENT–INTERDEPENDENT SELF-CONSTRUAL SCALES are seriously flawed, an extensive review (Levine et al., 2003) of research testing the theory of such construals concluded. The invalid instruments may be responsible for the inconsistent—sometimes contradictory—results in the field. Li (2002) pointed out that one root cause of the problem may be the paper-and-pencil nature of the instruments. Because words or sentences that are equivalent in meaning and form in two or more languages are sometimes very difficult or impossible to find (Li, 1999a, 1999b, 2001), participants in different language or cultural groups may interpret the questionnaires differently (e.g., Cross, Bacon, & Morris, 2000; Kanagawa, Cross, & Markus, 2001). Another cause of the problem is that the scales are too "broad-band" (Uleman, Rhee, Bardoliwalla, Semin, & Toyama, 2000, p. 2), measuring too many dimensions at once. Uleman et al. (p. 2) proposed that it was high time for the field to explore "narrow-band" measures.

To address the two problems of existing self-construal scales, Uleman et al. (2000) adapted the Inclusion of Other in the Self (IOS) Scale (Aron, Aron, and Smollan, 1992), which has seven Venn diagrams of two circles, one circle indicating the self and the other circle representing the other. In the first picture, the two circles are adjacent to each other. From the second picture to the seventh picture, the degree of overlap increases linearly (Aron et al., 1992). The scale is bipolar (apart–close) and one-dimensional with one end of the continuum as independent and the other interdependent. Uleman et al. (2000) argued that the adaptation of the IOS Scale was inspired by Markus and Kitayama's (1991) groundbreaking paper, in which Venn diagrams illustrated the relationship between the self and others, using circles with no overlap to indicate an independent relational self and using circles with overlap to indicate an interdependent relational self.

A major advantage of the IOS Scale's graphic representations over verbal descriptions is that graphic representations reduce the chance of cross-cultural misconstrual, because little or no translation of statements is required (Li, 2002). Although the IOS Scale is bi-polar, the use of it does not imply that self-construal is so. Instead, its use implies only that the researcher's intent is to measure one dimension at a time.

Li (2002) used the IOS Scale to measure four sets of self–other relationships (self and closest friend, self and close friends, self and closest family member, and self and close family members) in two cultural groups (Anglo Canadians and mainland Chinese) and found the scale to be sensitive and easy to use.

The present study extends Li's (2002) research by examining three additional sets of self–other relationships (self and *relatives* [that is, relatives who are outside

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of the immediate family], self and colleagues, self and neighbors) in three cultural groups (Canadians, Chinese, and Indians). Li used samples of university students. The present authors used samples of nonstudents, that is, adults of all professions and age groups. In the following sections, the present authors will review representative literature regarding independent–interdependent self-construals in North American and Asian samples and will then introduce two hypotheses.

Theoretical Framework

Two theories—independent–interdependent self-construal (Markus & Kitayama, 1991) and individualism–collectivism (I–C; Hofstede, 1980; Triandis, 1995)—constitute the theoretical construct for the present article. Markus and Kitayama (1991, p. 227) stated that *independent* individuals see themselves as unique and distinct from others, whereas *interdependent* individuals view themselves "as part of an encompassing social relationship."

Triandis (1995, p. 2) defined *individualism* as "a social pattern that consists of loosely linked individuals who view themselves as independent of collectives" and *collectivism* as "a social pattern consisting of closely linked individuals who view themselves as parts of one or more collectives (family, co-workers, tribe, nation)." Hofstede (1980) asserted that in North American and European cultures, individuals scored high on individualism, whereas in Asian cultures, persons scored high on collectivism. The two modes of self-construal in Markus and Kitayama's (1991) theory correspond to the two alternatives in the theory of I–C in that independent self-construal is the primary cognitive pattern in individualistic cultures, whereas interdependent self-construal is the primary cognitive pattern in collectivistic cultures (e.g., Gudykunst et al., 1996; Kim et al., 1996).

Self-Construal: Comparison Between North Americans and Asians

Studies showing a difference. Wang (2001) studied the individualistic and collectivistic tendencies of 119 American and 137 Mainland Chinese university students. When Wang asked them to recall early childhood events, participants described themselves by completing 20 sentences beginning with "I am." Wang compared several measures that included the following: (a) personal needs, desires, or preferences, (b) personal dislikes and avoidance, (c) personal evaluations, judgments, or opinions regarding other people, objects, or events, and (d) retention of control over one's own actions and resistance of group or social pressure. Wang found significant differences between the American and Chinese samples in how they remembered their early childhood events. For example, American memories were more self-oriented, emphasizing individual experiences or feelings. Conversely, Chinese memories were more other- or group-oriented, emphasizing collectivistic experiences or feelings. Wang found no consistent gender differences in the American and Chinese samples.

Kanagawa, Cross, and Markus (2001) reported that Americans were more likely than Japanese to describe themselves in positive terms. Also, situations influenced the American self-descriptions less than they did the Japanese ones. Because the Americans were self-assertive, but the Japanese were self-effacing, these findings indicate the possibility that Americans have more independent self-construals than do Japanese, whereas Japanese have more interdependent self-construals than do Americans.

Uleman et al. (2000) used the IOS Scale (Aron et al., 1992) to measure the relational self on three dimensions—family, relatives, and friends—in student samples of five cultural groups: Euro Americans, Asian Americans, Dutch, Turks, and Japanese. Uleman et al. found that the descending order of closeness for Euro Americans, Dutch, and Asian Americans was friends, family, and relatives; whereas the order for Turks and Japanese was family, friends, and relatives.

Lay et al. (1998) found that Asian Canadians scored higher on the allocentrism scale than did Euro Canadians, indicating that Asian Canadians had more interdependent self-construals in relation to family members than did Euro Canadians. Lay et al.'s instrument was the Family Allocentrism Scale, which was made up of 21 items measuring independent and interdependent self-construal in relation to family. For example, Item 1 stated, "I am very familiar to my parents." Item 21 stated, "it is important to feel independent of one's family."

Kashima et al. (1995, p. 930) found that Japanese and Koreans showed a stronger "collective self" and a weaker "individualistic self" (agency and assertiveness) than did Australians and Americans. Women showed stronger emotional relatedness than did men. Kashima et al. used several questionnaires, including the Collectivism Scale by Yamaguchi (1994), the Kanjin-Shugi Scale by Hamaguchi (1985), the Allocentrism Scale by Triandis et al. (1993), and the Friendship Questionnaire by Triandis, Bontempo, Villareal, Asia, and Lucca (1988).

Singelis (1994) found that the Euro Americans scored significantly higher than did the four Asian American groups on the independent scale and lower on the interdependent scale. Singelis's instrument included a 12-item scale measuring independent–interdependent self-construal.

Dhawan, Roseman, Naidu, Thapa, and Rettek (1995) tested the hypothesis that Americans had more independent self-construal than did Indians. Their data in four categories—social identity, interests, ambitions, and self-evaluation—supported the hypothesis. They found a significant gender difference in one category, social identity. Men in both cultures tended to have a stronger social identity than did women. Kuhn and McPartland (1954) developed the instrument that Dhawan et al. used, and Bond and Cheung (1983) validated it. Kuhn and McPartland asked participants to complete 20 sentences starting with, "I am." Later, Bochner (1994) reduced the 20 statements to 10 statements. Bochner found that Malaysians had more interdependent self-concepts than did Australians or British.

Comparing American and Hong Kong Chinese university students, Bond and Cheung (1983) found that Americans evaluated themselves as more individual-oriented,

self-assured, and self-enhanced than did Hong Kong Chinese. Hong Kong Chinese provided a more group-oriented and modest self-description than did Americans.

Studies with mixed results. Li (2002) examined whether Anglo Canadians were more independent than Mainland Chinese in construing their relationships with family members and friends. Li found strong cultural differences in self–family connectedness but not in self–friend connectedness. Chinese were closer to their family members than were Canadians, but Canadians were as close to their friends as were Chinese. In both samples, Li found gender difference in self–friend connectedness but not in self–family connectedness. In the Canadian sample, women were closer to their friends than were men; whereas in the Chinese sample, men were closer to their friends than were women. Li also found that not all Canadians were independent and that not all Chinese were interdependent. The differences lay in the proportions of Canadians and Chinese in each category. Li used an instrument that she adapted from the IOS Scale (Aron et al., 1992).

Later, using a combination of qualitative and quantitative methods, Li (2003) examined the materialistic and spiritual aspects of self–other boundary in Anglo Canadians and mainland Chinese. Applying the traditional cultural-anthropology method, Li first collected ethnographic data and then developed open-ended questions. The qualitative approach had three advantages: (a) the scenarios and questions were derived from real-life occurrences, (b) the open-ended questions gave participants room in which they could elaborate on their answers, and (c) the "why" questions gave participants an opportunity to offer insight. Built on the qualitative data, the quantitative analyses showed patterns and enabled intergroup comparisons. Li asserted that using a combination of qualitative and quantitative methods enhanced research findings over using one method alone.

Li (2003) found that mainland Chinese were more likely to share material belongings and less likely to share their opinions with close others than were Anglo Canadians. Li reasoned that human beings, regardless of cultural backgrounds, are willing to share their less important belongings with others and to keep the most important belongings to themselves. The most inaccessible region is material belongings for Canadians and spiritual belongings for Chinese.

Comparing Asian and American students, Cross (1995) found no significant difference in the mean scores of independent self-construal. However, a significant difference arose in the ratings of interdependent self-construal. Asian students were more interdependent than American students. Cross used Yamaguchi's (1994) Collectivism Scale as well as Breckler, Greenwald, and Wiggins' (1986) Private Ego-Task Subscale. Cross instructed participants to rate the importance of phrases such as "being unique—different from others in many respects" and "maintaining harmony in one's group."

Studies that showed no difference. Misra and Giri (1995) examined gender differences in self-construal among 25 male and 25 female Indian university stu-

dents. They developed a scale of 31 items measuring independent and interdependent self-construal. The independent self-construal scale contained two subcategories: "self/others differential" and "self knowledge." The interdependent self-construal measure consisted of "others evaluation" and "maintaining self/other bonds." Misra and Giri found no significant gender difference in terms of the mean scores measuring independent and interdependent self-construal.

Brockner and Chen (1996) examined differences in self-construal between samples from the People's Republic of China and the United States. Surprisingly, they found no significant difference between Chinese and Americans. Brockner and Chen used a scale developed by Triandis et al. (1986) that was made up of 11 items. The measure asked participants to mark on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) their answers to statements such as "One should live one's life independently of others as much as possible" and "One does a better job working alone than working with a group."

Study with reverse results. In 1988, Hui developed a 63-item scale measuring a person's individualistic–collectivistic tendencies in relation to specific targets such as parents and friends. Despite his expectations, Hui (1988) found that Hong Kong Chinese students were significantly more individualistic than American students.

Hypotheses

In the present study, our main goal was to test the following hypothesis:

Hypothesis 1: (a) Anglo Canadians are more independent than mainland Chinese and Indians in construing relationships between the self and close others. (b) Chinese and Indians are more interdependent than Canadians in construing such relationships.

A secondary goal was to test the following hypothesis:

Hypothesis 2: In construing their connectedness with close others, men are more independent than women, whereas women are more interdependent than men.

Method

Participants

Participants were 220 Anglo Canadians from a Northern city in the province of British Columbia in Canada; 196 Chinese from Kunmin, the capital city of Yunan province in China; and 212 Indians from Vadodara, a city in the northwestern province of Gujarat in India. All participants were nonstudents, adults of various professions.

Table 1 shows detailed information of participants' gender, age, education level, financial standing, health status, marital status, and job category. As Table

TABLE 1. Demographic Variables as Functions of Culture

	India		China		Canada	
Variables	n	%	n	%	n	%
Gender						
Men	111	52.4	103	52.6	114	51.8
Women	101	47.6	93	47.4	106	48.2
Age						
< 30	33	15.5	36	18.3	62	28.1
30–39	88	41.5	69	35.2	47	21.4
40–49	39	18.4	42	21.4	50	22.7
50–59	28	13.2	25	12.8	41	18.6
60 and over	24	11.3	24	12.2	20	9.1
Education						
Illiterate	0	0	4	2.0	1	0.5
Primary	6	2.8	4	2.0	6	2.7
Middle school	43	20.3	34	17.3	36	16.4
High school	84	39.6	62	31.6	87	39.5
University	79	37.3	92	46.9	90	40.9
Financial standing						
Very poor	4	1.9	7	3.6	3	1.4
Poor	39	18.7	21	10.7	15	6.8
Average	58	27.8	110	56.1	59	26.8
Above average	102	48.8	48	24.5	137	62.3
Affluent	6	2.9	10	5.1	6	2.7
Health status						
Excellent	92	43.4	97	49.5	80	36.4
Good	110	51.9	64	32.7	127	57.7
Poor	10	4.7	32	16.3	13	5.9
Marital status						
Single	18	8.5	19	9.7	53	24.1
Married	189	89.2	156	79.6	75	34.1
Living together	0	0	10	5.1	64	29.1
Other	5	2.4	11	5.6	28	12.7
Job						
Professional/owner	25	12.1	26	13.3	37	16.8
Clerical	66	31.9	38	19.4	62	28.2
Labor	16	7.7	16	8.2	56	25.5
Homemaker	61	29.5	37	18.9	34	15.5
Retired	16	7.7	69	35.2	31	14.1
Other	23	11.1	9	4.6	0	0

1 shows, the number of men and women was fairly evenly distributed among the three samples. With regard to the proportion of participants in each age group, a chi-square test indicated statistically significant differences among the three countries, $\chi^2(8, 627) = 28.32$, $p < .001$. As Table 1 shows, more Canadians were

in the age group of 30 years old or younger (28.1%) than were Chinese (18.3%) or Indians (15.5%). On the other hand, more Indians (41.5%) and Chinese (35.2%) were in the age group of 30–39 years old than were Canadians (21.4%). In the age groups of 40–49 years old and 60 years old or older, the proportions of participants were fairly evenly distributed among the three countries. In the age group of 50–59 years old, there were more Canadians (18.6%) than Indians (13.2%) or Chinese (12.8%).

In the Chinese group, we found a significant negative correlation between age and connectedness between self and close friends, $r(196) = -.38, p < .01$. As a person ages, he or she tends to be less close to his or her friends. We found no significant correlation between age and the other dependent variables in the Canadian and Indian groups.

The education level of participants ranged from "no schooling" to "university." One Canadian, four Chinese, but no Indians were illiterate. To participate in the present study, the illiterate participants dictated their answers, and researchers filled out a short questionnaire for them. On a Likert-type scale, the researchers and participants scored "no schooling" as 1, "primary school" as 2, "middle school" as 3, "high school" as 4, and "university" as 5. A chi-square test indicated no statistically significant differences among the three countries with regard to the proportion of participants at each education level.

In the Indian group, we found a significant correlation between a person's education level and his or her closeness with relatives, $r(211) = -.32, p < .01$. The higher the education level, the less closely the person was bound to his or her relatives. We found no significant correlations between education level and the dependent variables in the Canadian and Chinese groups.

We asked participants to rank their "financial standing in comparison with others." We scored "very poor" as 1, "poor" as 2, "average" as 3, "above average" as 4, and "affluent" as 5. With regard to the proportion of participants at each financial standing, a chi-square test indicated statistically significant differences among the three countries, $\chi^2(8, N = 624) = 69.00, p < .001$. Table 1 shows detailed percentages of participants at each financial standing for the three countries. We found no significant correlation between financial standing and the dependent variables. Consequently, we dropped financial standing from further statistical analysis.

We also asked participants to rank their health status. We scored "excellent" as 1, "good" as 2, and "poor" as 3. With regard to the proportion of participants' self-rated health category, a chi-square test indicated statistically significant differences among the three countries, $\chi^2(6, N = 627) = 44.25, p < .001$. Table 1 shows detailed percentages of participants in each health category for the three countries. We found no significant correlation between health status and the dependent variables. Consequently, we dropped health status from further statistical analysis.

In the job category, more Chinese were retirees than Indians and Canadians. The following circumstance may have played a role: The Chinese government has an unofficial retirement age of 48–50 years old for female employees and 55

years old for male employees. With regard to the proportion of participants in each job category, a chi-square test indicated statistically significant differences among the three countries, $\chi^2(12, N = 623) = 122.11, p < 0.001$. Table 1 presents detailed percentages of participants in each job category for the three countries. We found no significant correlation between job category and the dependent variables. Consequently, we dropped job category from further statistical analysis.

The Questionnaire

The questionnaire consisted of seven questions asking participants to select, among seven diagrams of same-size circles, the picture that best described the participant's relationships with his or her closest family member, close family members, closest friend, close friends, relatives, colleagues, and neighbors. We adapted the seven diagrams of same-size circles from the IOS Scale (Aron et al., 1992). The only difference between the scale that we used in the present study and the original IOS Scale was that our circles had the same size and theirs had different sizes (i.e., the smaller circle represented the self, and the bigger circle represented the other person; see the Appendix). Researchers have used the IOS Scale primarily to describe dyadic relationships such as romantic relationships and self–best-friend relationships (Agnew et al., 1998; Aron & Aron, 1986; Aron et al., 1991; Lin & Rusbult, 1995). In applying the IOS Scale to various samples, researchers have found it robust and reliable (Agnew et al., 1998; Aron & Aron, 1986; Aron et al., 1991; Lin & Rusbult, 1995).

In asking the questions, the questionnaire gave participants clear explanations of the symbolic meaning of the circles. For example, for the question pertaining to the relationship of self and closest friend, the questionnaire gave the following clarification: "Note that the pictures symbolize a relationship involving two people. One circle represents you and the other represents your closest friend." For the question pertaining to the relationship of self and close friends, the questionnaire gave the following clarification: "Note that each picture symbolizes a relationship involving three or more people. One circle represents you and the other circles represent your close friends." For purposes of data analyses and presentation, we converted the diagrams to a Likert-type scale ranging from 1 (*apart*) to 7 (*most overlapping*).

Translation of the Questionnaire

We borrowed the English and Chinese versions of the questionnaire from an instrument used by Li (2002). Gira Bhatt, who is fluent in both English and Gujarati, translated the English version into Gujarati for the Indian version. We checked the accuracy of the translation by having another English–Gujarati bilingual person back-translate the Indian version into English.

Because the choices for the questions were presented graphically, they required no translation. The only part that needed translation was the set of short questions, which did not present any difficulty.

Results

We calculated the means of the frequencies of all seven dependent variables by cultural groups. Table 2 shows the means. In each cultural group, the table presents means of frequencies for men and women separately.

TABLE 2. Means for Self–Close-Other Connectedness as Function of Culture and Gender

Gender	India			China			Canada		
	M	SD	n	M	SD	n	M	SD	n
Closest family member									
Men	6.05	1.17	111	5.91	1.25	103	4.54	1.82	113
Women	6.12	1.57	101	5.87	1.33	93	4.88	1.77	106
Close family members									
Men	5.55	1.31	111	5.47	1.35	103	3.84	1.65	114
Women	5.84	1.49	101	5.51	1.31	93	3.98	1.76	106
Closest friend									
Men	4.54	1.84	111	4.19	1.65	103	4.02	1.95	114
Women	5.40	1.67	101	4.13	1.64	93	4.63	1.80	106
Close friends									
Men	4.11	1.55	111	3.66	1.44	103	3.02	1.48	113
Women	4.64	1.59	101	3.67	1.35	93	3.31	1.37	106
Relatives									
Men	3.86	1.50	111	3.76	1.45	103	2.12	1.28	113
Women	4.56	1.93	100	3.90	1.51	93	2.50	1.41	106
Colleagues									
Men	3.97	1.77	109	3.39	1.42	103	2.36	1.33	113
Women	4.49	1.79	89	3.35	1.24	93	2.46	1.35	103
Neighbors									
Men	3.45	1.83	110	3.26	1.49	103	1.63	1.23	114
Women	4.12	1.89	100	3.09	1.50	93	1.59	0.85	106

To test for main effect of culture (Indian, Chinese, Canadian), main effect of gender (male vs. female), and interaction of culture by gender, controlling for age and education, we conducted a multivariate analysis of covariance (MANCOVA; SPSS 12.0) using all seven dependent variables: relationships of self to closest family member, close family members, closest friend, close friends, relatives, colleagues, and neighbors. We will report the results in terms of those pertaining to Hypotheses 1 and those pertaining to Hypothesis 2. We included age and education but not the other demographic variables because each of these two variables had one significant correlation with one dependent variable.

Culture and Self-Construal: Testing Hypothesis 1

Hypothesis 1 stated that significantly more Indians and Chinese than Canadians would perceive more connected relationships between the self and the closest family member, close family members, closest friend, close friends, relatives, colleagues, and neighbors.

A MANCOVA indicated a strong main effect of culture, Wilks's $\Lambda = .78$, $F(14, 1006) = 9.74$, $p < .0001$, $\eta^2 = .12$. Multiple comparisons for each of the seven dependent variables indicated statistically significant differences among the means of the three cultural groups, as follows:

1. For connectedness between self and closest family member, the mean of the Indian group was significantly higher than that of the Canadian group, $p < .0001$, $\eta^2 = .46$. There was no statistically significant difference between the India and Chinese groups. The mean of the Chinese group was significantly higher than that of the Canadian group, $p < .0001$, $\eta^2 = .39$.

2. For connectedness between self and close family members, the mean of the Indian group was significantly higher than that of the Canadian group, $p < .0001$, $\eta^2 = .60$, but not different from that of the Chinese group. The mean of the Chinese group was significantly higher than that of the Canadian group, $p < .0001$, $\eta^2 = .54$.

3. For connectedness of self and closest friend, the mean of the Indian group was higher than the means of both the Canadians, $p < .005$, $\eta^2 = .18$, and the Chinese, $p < .0001$, $\eta^2 = .22$. There was no statistically significant difference between the means of the Chinese and the Canadians.

4. For connectedness of self and close friends, the mean of the Indian group was significantly higher than the means of both the Canadians, $p < .0001$, $\eta^2 = .41$, and the Chinese, $p < .0001$, $\eta^2 = .23$. The mean of the Chinese was significantly higher than that of the Canadians, $p < .005$, $\eta^2 = .18$.

5. For connectedness of self and relatives, the mean of the Indian group was significantly higher than that of the Canadian group, $p < .0001$, $\eta^2 = .62$, and slightly higher than that of the Chinese group, $p > .05$, $\eta^2 = .12$. The mean of the Chinese group was significantly higher than that of the Canadian group, $p < .0001$, $\eta^2 = .50$.

6. For connectedness of self and colleagues, the mean of the Indian group was significantly higher than both that of the Canadians, $p < .0001$, $\eta^2 = .62$, and that of the Chinese, $p < .0001$, $\eta^2 = .29$. The mean of the Chinese group was significantly higher than that of the Canadians, $p < .0001$, $\eta^2 = .33$.

7. For connectedness of self and neighbors, the difference in means between the India and Canadian groups was statistically significant, $p < .0001$, $\eta^2 = .75$. The difference in means between the Indian and the Chinese groups was also statistically significant, $p < .0001$, $\eta^2 = .20$. The Chinese group mean was statistically different from the Canadian group mean, $p < .0001$, $\eta^2 = .55$. The mean of the Indian group was the highest, that of the Chinese was in the middle, and that of the Canadians was the lowest.

Thus, the present results partially supported Hypothesis 1. Figure 1 shows graphically the mean differences of the three groups in all seven types of self–other connectedness.

Gender and Self-Construal: Testing Hypothesis 2

Hypothesis 2 stated that in all three cultural groups, significantly more women than men would perceive a more connected relationship between the self
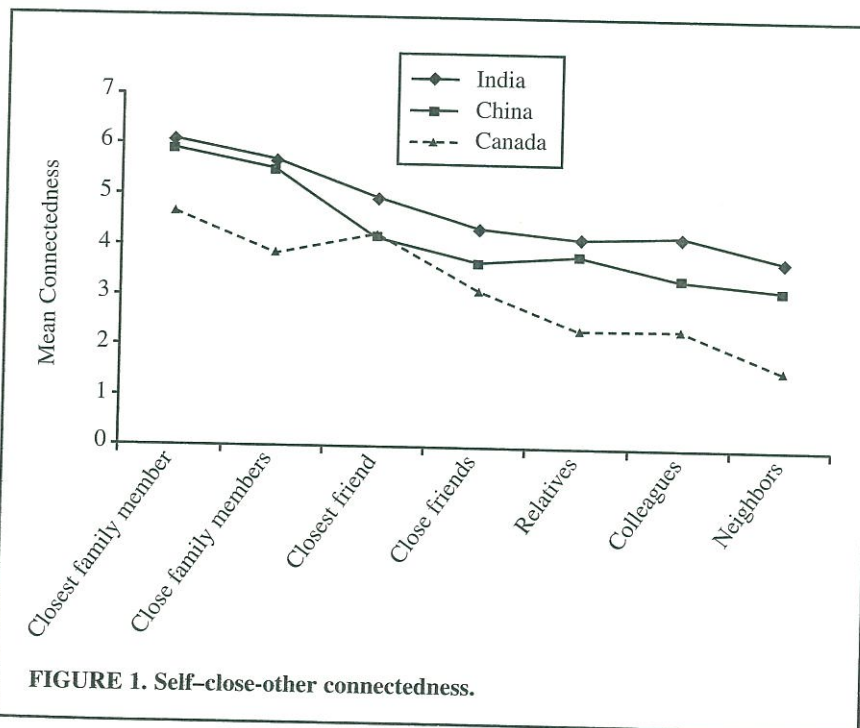
FIGURE 1. Self–close-other connectedness.

and the closest family member, close family members, closest friend, close friends, relatives, colleagues, and neighbors.

Controlling for age and education, we performed a MANCOVA, which indicated no significant main effect of gender, $p > .05$, and no significant interactions of culture by gender, $p > .05$.

For within-condition comparisons, an analysis of variance (ANOVA) indicated statistically significant gender differences in the India group and in the Canadian group in some of the dependent variables. Chinese men and women did not show significant differences in any of the seven dependent variables, as Table 2 shows.

The means of India women were higher than those of India men in four dependent variables: relationships of self and closest friend, $F(1, 210) = 12.08$, $p = .001$, $\eta^2 = .06$; self and close friends, $F(1, 210) = 5.45$, $p < .05$, $\eta^2 = .03$; self and relatives, $F(1, 209) = 8.81$, $p < .005$, $\eta^2 = .04$; and self and neighbors, $F(1, 208) = 6.62$, $p < .05$, $\eta^2 = .03$.

The mean of Canadian women was higher than that of Canadian men in one dependent variable: relationship of self and closest friend, $F(1, 218) = 4.93$, $p < .05$, $\eta^2 = .03$.

Thus, the present results also partially supported Hypothesis 2.

Discussion

The present data yielded five findings.

The Emergence of a Middle Land

The most striking finding of the present study is the possibility that China has emerged as a middle land. In six of the seven types of self–other relationships, the Chinese participants' scores were between those of the collectivistic Indians and the individualistic Canadians.

Data from the 1990-1993 World Values Survey (World Values Study Group, 1994) indicated that China was more collectivistic than India: The I–C rating was 2.00 for China and 4.40 for India. Canadians had a rating of 8.50, indicating that they were almost as individualistic as Americans (9.55). The individualism ratings by Hofstede (2001) also indicated that Chinese were less individualistic than Indians, although the two groups' scores were more similar than different. The score was 20 for the Chinese sample and 48 for the Indian sample. Canadians were almost as individualistic as Americans, the former scoring 80, and the latter scoring 90.

If a person's self-construal reflects his or her culture, the Chinese culture may have changed into a less collectivistic entity. In the last two decades, China's booming economy has raised the Chinese people's standard of living and may have changed the dynamics of interpersonal relationships. The change seems to be in the direction of an increase in interpersonal distance. We may explain this

phenomenon by a simple anecdote. In a recent visit to China, Han Z. Li asked her sister how she and her husband managed to move all of their furniture from their old apartment to a new apartment, because there is no elevator in either of the five-story apartment buildings. The 35-year-old physician smiled and said, "We phoned a moving company." A moving company is a new phenomenon in China since changes in government policies have allowed some private enterprises. In the past, the Chinese people maintained close ties with everybody so that they could get help in times of difficulties. Today, they can afford the interpersonal distance because they have the financial capacity to get help from other available resources. (Matsumoto, 1999, noticed similar changes in interpersonal dynamics in Japan. He observed that the introduction of cellular phones in recent years may have increased the psychological distance among the Japanese.) Two decades ago, most Chinese families did not have telephones. Today even rural Chinese families have telephones, and most city dwellers even have cellular phones. These changes may have induced more distance in interpersonal relationships in China. The present unexpected finding of China as a middle land seems to be consistent with recent researchers' assertions that it was time for the field of cultural psychology to "reclaim the individual from Hofstede's ecological analysis" (Bond, 2002, p. 73) and "rethink Individualism and Collectivism" (Oysermann, Coon, & Kemmelmeier, 2002, p. 3).

Cultural Similarities in Self–Friends Connectedness

It is interesting that we found cultural similarities in connectedness of self and closest friend between Canadians and Chinese. This finding somewhat contradicts one assumption of the theories of independent–interdependent self-construal (Markus & Kitayama, 1991) and I–C (Hofstede, 1980; Triandis et al., 1986), the assumption that individuals in North American cultures are more independent than collectivists on all dimensions of human relations including the dimension of the relationship of self and closest friend. A Canadian can be close to his or her closest friend but can also be apart from other social persons (i.e., family, relatives, colleagues and neighbors).

This finding also contradicts major literature in the field of cultural psychology, which supports all the assumptions of these two theories. But the finding makes perfect sense if we consider a quote by the English poet John Donne (1624/1994, p. 441): "No man is an *Iland*, intire of it selfe." It is only human to feel robustly connected with one's best friend or a few close friends, be the person a Canadian or a Chinese. As family bonds dissolve in Western societies, human beings form other strong relationships, such as friendship, for emotional support. In the Chinese culture, people have close ties with both family and friends. In Western cultures, people appear to prefer friends to family. This tendency is well reflected in the theme of a Canadian best seller, *Best Friends* (Wohlmuth & Saline, 1998): Friends are the family we choose.

Cultural Difference in Self–Family Connectedness

The most conventional finding in the present study is one regarding the relationship of self and family. Both the Chinese and the Indians were closer to their family members than were the Canadians. There was no significant difference between the Chinese and the Indians. In the relationship dimension of self and family, the self-construal of both Chinese and Indians reflected traditional cultures, and the self-construal of Canadians reflected an individualistic culture. These findings strongly support the theories of independent–interdependent self-construal (Markus & Kitayama, 1991) and I–C (Hofstede, 1980; Triandis et al., 1988).

Despite strong criticisms (Levine et al., 2003; Matsumoto, 1999) for the theory of independent–interdependent self-construal and despite severe questioning (Bond, 2002; Li, 2003; Oysermann, Coon, & Kemmelmeier, 2002) of I–C, evidence from the present study indicates the possibility that these two theories still apply to some dimensions of human relationships in some cultural groups. In spite of capitalism and the market economy, the Chinese are close to their family members. It seems that regarding family, the Confucian philosophy of placing the family above all human relations still prevails (Elvin, 1985; Tu, 1985; Wu, 1984).

Gender Differences

In the present study, we found a small but significant difference between Canadian men and women in the relationship of self and closest friend. Although all Canadians in the present sample reported close relationships to their closest friends, women seemed to do so more than men. This somewhat supports Cross and Madson's (1997) assertion that men in Western cultures are more independent in their self-construal than women.

The present data indicated consistent gender differences in the Indian group, although these differences were small. Indian women were closer to their friends, relatives, and neighbors than were India men. This finding is consistent with a report (Watkins et al., 1998, 2003) that Indian women were more interdependent than Indian men, but it is inconsistent with a report (Misra & Giri, 1995) that there were no significant gender differences in ratings of independent–interdependent self-construal in a sample from India.

The direction of the gender differences in the present Indian sample was the same as that in the Canadian sample: Women were more interdependent than men. Watkins et al. (1998) reported similar findings: Indian women were more interdependent than Indian men; Canadian women were more interdependent than Canadian men. The findings in the present study and in Watkins et al. have seemed to indicate that Cross and Madson's (1997) assertion that men in Western cultures are more independent in their self-construal than women may be extended to non-Western cultures. However, researchers need caution because we found no consistent gender difference in the Chinese sample in either the present study or previous studies (Li, 2002, 2003; Watkins et al., 1998).

Because of the various findings regarding self-construal between men and women in various cultural groups, future researchers need to perform more research to establish a coherent theory. Do men and women construe their selves differently? If so, what are the directions of the differences?

Demographic Variables and Self–Other Connectedness

A unique feature of the present study was that all three samples were drawn from the general population—not from university students. Our reasoning was that university students may or may not represent other age groups, and people's self concepts may change over their life span (Berzonsky, 1990; Pipp, Shaver, Jennings, Lamborn, & Fischer, 1985). But the present findings seem to indicate that university students can represent people of other age groups, because age did not have a strong correlation with variables measuring self-construal in any of the three samples. Human attachment style may not change significantly over the life span. Furthermore, the low correlations between the demographic variables and the seven dimensions of self-construal should give researchers confidence in previous studies of university samples, which are common in the field.

Generalizability

In the present study, we drew the three samples from one region in each country, and the samples may or may not represent the general populations in the three countries. However, we carefully considered compatibility and generalization when choosing the samples. We drew the China sample in Kunming, a city that (unlike Beijing and Shanghai) is not considered as being at the forefront of economic development but that is not as backward as the countryside. Although Kunming has various minority groups, we asked only people of Han ancestry (the vast majority of Chinese are Han) to participate in the present study, hoping that the sample would represent the Han people who live in most Chinese cities. We drew the Canadian sample in a medium-sized city that (unlike Vancouver and Toronto) is not considered at the forefront of economic development. All the participants spoke English as their first language (Anglo Canadians). We drew the Indian sample from Vadodara, a medium-sized city in the northwestern province of Gujarat, rather than from any of the major economic hubs, such as Mumbai, Kolkutta, and Delhi. All of the Indian participants spoke Gujarati. Although India is a conglomeration of regional and linguistic diversity, a common cultural thread of values certainly links all of these regions. These values are rooted in the long shared history and ancient mythologies that identify this nation as India.

Conclusion

In conclusion, the present research contributes to the field in three ways. First, it involved a graphic representation scale (IOS) that measured self–other

connectedness, in contrast to the pencil-and-paper questionnaires, which may be responsible for the inconsistent findings in previous research. Second, the present evidence indicating that China has emerged as a middle land also indicates that culture changes. Theories or findings that were true two decades ago may or may not be true today. Researchers need to be open-minded and willing to take the challenge that their theories can lose applicability over time. Lastly, the finding that the Canadians were as close to their closest friend as were the Chinese seems to challenge one assumption of the two theories on the self–friend relationship dimension: those of independent–interdependent self-construal and I–C. However, those theories well account for the differences in the present study between the Indian sample and the Canadian sample in all seven relationship dimensions, indicating that, despite their limitations, those theories can still serve researchers as road maps.

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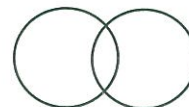
APPENDIX
Sample Question

Please indicate the picture which best describes your relationship. Note that each picture symbolizes a relationship involving two persons. One circle represents you, and the other represents your friend.
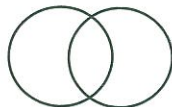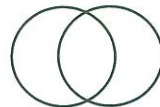

(1)   (2)   (3)

(4)   (5)   (6)

(7)