The relational self: Closeness to ingroups depends on who they are, culture, and the type of closeness

James S. Uleman

New York University

Eun Rhee

University of Delaware

Nenshad Bardoliwalla

New York University

Gün Semin

Free University of Amsterdam

Midori Toyama

Osaka University

Cultural differences in individualism and collectivism (I-C) describe important variations in how the self relates to others, but existing scales may be too broad-band to precisely measure this aspect of I-C. They also do not distinguish among particular ingroups and types of interdependence with them. The Circles of Closeness scale addresses these limitations. Initial results from Euro-American, Asian-American, Dutch, Turkish, and Japanese samples of college students are presented. The scales have high alpha reliability. Different results were obtained for three ingroups – immediate family, relatives, and friends – and six closeness types – emotional, supportive, identity, reputational, similarity, and harmony. These factors significantly interacted with each other, arguing for a more differentiated view of I-C.

In his recent chapter on the self, Baumeister (1998) noted that research and theory on the self falls into three major areas: reflexive consciousness, the interpersonal self, and self as executive. Studies of the interpersonal self deal with self-presentation, how self-views are affected by others, social consequences of self-views, and self-related social emotions. Findings in all of these areas would seem to be conditional on the type of relationship the self has with others, and who these others are. However, these issues receive little systematic attention in the self literature, perhaps because most of this research is conducted with college students who are strangers or dating.

We became interested in treating these issues of “type of relationship” and “with whom” more systematically through our interest in cross-cultural research. Cultural differences in how people understand the self’s relationship to others are central to several prominent constructs in cross-cultural research today, particularly individualism and collectivism (e.g., Kim, Triandis, Kâğıtçibasi, Choi, and Yoon, 1994; Triandis, 1995) and independence and interdependence (Markus and Kitayama, 1991).

In their classic paper, Markus and Kitayama (1991) contrast cultures in which self-construals are independent, i.e., “separate from social context,” with interdependent cultures in which self is “connected with social context” (p. 230). Their Venn diagrams of the relations between self and others – shown as circles with no overlap in independent cultures, and with some overlap in interdependent ones – have become central metaphors for theory in this area. The research they review draws heavily on contrasts between U.S. (independent) and East Asian (interdependent) cultures, as do more recent reviews (e.g., Fiske, Kitayama, Markus, and Nisbett, 1998).

Triandis (1995), following Hofstede (1980), describes cultures as individualist or collectivist. He and his colleagues have focused more on measuring differences in individualism and collectivism (or idiocentrism and allocentrism at the individual level). These are conceived of as multi-faceted, so Triandis lists multiple aspects of individualism and collectivism. Most relevant to present purposes are (1) a “definition of the self [that] is interdependent in collectivism and independent in individualism” and (2) “an emphasis on relationships ... in collectivist cultures” in contrast to an emphasis “on rational analyses of the advantages and disadvantages of maintaining a relationship” in individualist cultures. (Other aspects include different priorities for personal versus communal goals, and a “focus on norms, obligations, and duties ... [versus] attitudes, personal needs, rights, and contracts.” Triandis, 1995, pp. 43–44).

Many measures of individualism and collectivism (I-C) have been proposed. Rhee, Uleman, and Lee (1996) examined the relationships among most I-C measures available at the time, through a series of confirmatory factor analyses of data from three cultures. They sorted items into subscales on three bases: the items’ source, whether they referred to individualism or collectivism, and whether they referred to kin or non-kin. They found that the resulting subscales are not highly related. When I-C was treated as a single latent variable (so that individualism is assumed to be the opposite of collectivism), the mean absolute loading of the subscales was only .38. When I and C were treated as two separate latent variables, the mean loading only rose to .40. In addition, the latent variable models’ fits were significantly improved by taking into account the particular ingroup to which the items refer (kin versus non-kin). In fact, the distinction between kin and non-kin items accounted for more variance than that between individualism and collectivism items!

These results suggested two things to us. First, better measures of I-C are needed. Now that the broad-band measures in wide use have demonstrated the general importance and empirical richness of I-C, it may be time to develop more narrow-band measures of specific aspects of I-C. Broad-band measures not only correlate poorly with each other, but their alpha reliabilities are typically in the .60s and .70s. Better focused narrow-band measures should allow more precise prediction of behavioral phenomena related to I-C. They could also transform the widespread assumption that conceptually distinct aspects of I-C are highly interrelated into an empirical question (see Kâğıtçibasi, 1994, 1997).

Second, measures of I-C should be capable of referring to specific target groups. Rhee *et al.*’s (1996) results suggest that people can be collectivists or interdependent with one group, and at the same time individualists or independent with another group. Current conceptions

of the self include its context dependence (e.g., Baumeister, 1998; Turner, 1987), and an important class of contexts is significant ingroups.

Prior research on I-C, using a variety of measures, provides evidence that people relate differently to different target groups. Ho and Chiu (1994) used Hui's (1988) Individualism-Collectivism (INDCOL) scale; it assesses relations with six target groups ranging from spouse to co-workers. For their Chinese sample, collectivism was "endorsed for relationships with friends and especially coworkers, but not for those with the spouse, kin, and neighbors" (p 151).

Göregenli (1997) asked over 300 Turkish adults about their likelihood of engaging in the seven behaviors used by Hui and Triandis (1986) to measure I-C, with nine target others ranging from spouse to stranger. In addition to main effects for both behaviors and targets, there was a significant Behavior $\times$ Target interaction. Because of this variation in I-C with target group, Göregenli concluded that "Turkish culture cannot be placed on one or the other side of the individualism-collectivism dichotomy."

Fijneman, Willemsen, and Poortinga (1996) measured the readiness to support (input) and expectations of receiving support from (output) ten target groups in five countries: Hong Kong, Turkey, Greece, The Netherlands, and the U.S. Although the ratio of input to output was similar for all countries (contrary to what most conceptions of I-C predict), both measures varied widely across target groups. Target group accounted for more than five times the variance that country or Group $\times$ Country did. Thus beliefs about social support were largely a function of the particular group involved.

Matsumoto, Weissman, Preston, Brown, and Kupperbusch's (1997) IC Interpersonal Assessment Inventory (ICIAI) asks participants to rate the importance and frequency of 25 generic I-C behaviors (e.g., "be loyal to," "cooperate with") toward four target groups ranging from family to strangers. They compared results from college students in the U.S., Japan, South Korea, and Russia (Study 6). The relative standing of these samples on I-C depended on the target group. For example, Japan was more collectivist than South Korea or the U.S. toward strangers, but least collectivist of all toward family. Thus culture and social target interacted as determinants of I-C, as measured by the ICIAI.

Toward the current measure

Hoping to devise better measures of central aspects of I-C, the first three authors performed a content analysis of I-C and related scales referred to in publications through 1997 – some 429 items in all. (We excluded value items (e.g., Schwartz, 1992) and long vignettes (e.g., Peng, Nisbett, and Wong, 1997; Triandis, 1995) because they do not adapt readily to use with multiple target groups.) Most of these items (66%) referred to relationships with particular people or groups, thus confirming the centrality of relationships to I-C.

Further examination of these I-C items made it apparent that relationships vary in many ways. This is clearest if one thinks about the ways of being interdependent with others. We were able to categorize 81% of these items into six different types of interdependence: (1) emotional closeness (enjoying others' company, sharing emotional fate, wanting to live nearby; 28 items), (2) supportive closeness (responding to others' material needs, seeking advice; 103 items), (3) identity closeness (having one's identity determined in part by others; 29 items), (4) reputational closeness (sharing in each others' achievements, successes and failures; 11 items), (5) similarity to others (versus personal uniqueness; 19 items), and (6) harmony with the group (supporting group decisions, maintaining harmony; 41 items). None

of the 429 items from existing scales referred to romantic relationships, even though this is a prominent focus in much of the “relationships” literature, perhaps because romantic relations are thought to be uniquely Western.

Next we adapted the Inclusion of Other in Self scale (Aron, Aron, and Smollan, 1992) to measure other kinds of (non-romantic) closeness, in the interests of developing a short scale that could refer to multiple groups, minimizing translation difficulties by relying on a visual metaphor, and taking Markus and Kitayama’s (1991) Venn diagrams of the self more literally. Tropp and Wright (1995) successfully adapted this scale to measure ethnic ingroup identity. The result was a 21-item scale, obtained by crossing three important and universal ingroups – immediate family, other relatives, and friends – with our six types of closeness plus a non-specific “general closeness” scale that participants completed first. Thus each type of closeness to each ingroup was measured by a single item (as in the Aron *et al.* measure). We retained Aron *et al.*’s term “closeness” rather than using “interdependence” or “connectedness” because closeness is a simpler and more common English term, and it is most apt for the spatial metaphor of Venn diagrams. In addition, Fijneman *et al.* (1996) found that “emotional closeness” predicted differences in input and output toward various groups extremely well.

This paper describes our initial use of this Circles of Closeness scale with five different cultural groups, chosen to span the range from collectivist or interdependent (Turkish and Japanese) to individualist or independent (Euro-American and Dutch) cultures. In Hofstede’s (1980) factor analysis of work-related attitudes in over 80 countries, the U.S. sample scored 91 on individualism (the highest score on a scale from 0 to 100), The Netherlands scored 80, Japan scored 46, and Turkey scored 37.

Thinking of closeness as a central aspect of collectivism, we hypothesized that the Turks and Japanese would score higher than the Dutch and Euro-Americans, and that Asian-Americans would score somewhere in the middle. We also expected this pattern to be most clear for the family ingroup, and least clear for the friends ingroup, consistent with these ingroups’ relative prominence in research and theory on I-C. Of course, this hypothesis assumes that collectivism is a coherent construct and similar across cultures. But there is a growing body of opinion “that individualism-collectivism is not a comprehensive and precise dimension but rather a loose collection of many different cultural characteristics” (Stephan, Stephan, Saito, & Barnett, 1998, p. 728; see also Triandis, 1995; Kagitçibasi, 1994, 1997). Thus there may be several kinds of collectivism, which could produce divergent findings for the Turks and Japanese.

Finally, we were interested in the scale’s internal structure and planned other exploratory analyses.

Method

Samples

Participants were college students from New York University (divided into 78 Euro-Americans, 38 men and 40 women; and 58 Asian-Americans, 24 men and 34 women); the Free University of Amsterdam (33 men and 46 women); Istanbul (41 men and 47 women); and Osaka University (32 men and 66 women). The Dutch and Turkish samples were older (23.0 and 22.5 years, respectively) than the U.S. (19.7 yrs) and Japanese (21.2 yrs) samples, $F(4,393) = 22.84, p < .001$.

Scale and procedure

On the first page of the Circles of Closeness scale, participants answer questions about their “immediate family” (defined as parents and siblings), “other relatives” (e.g., grandparents and uncles),¹ and “close friends.” Then on each of the next seven pages, they use a Venn diagram scale to describe their closeness to each of these groups (see Figure 1). The first set of scales asks “How close are you?” to each group, with no further elaboration of what “close” means. This is followed by scales in which closeness is to be understood (2) “in emotional terms,” (3) “in terms of mutual support, and responsibility to help each other,” as (4) “identity. How important is the other in determining who you are? How much is the group a part of you?”, as (5) “reputation. How much do your actions affect the reputation or honor of the group?”, as (6) “similarity . . . how distinctive or unique you are”, and (7) as “harmony with the group.” Thus items are organized by closeness type rather than by ingroup.

The Closeness scale was translated into Dutch, Turkish, and Japanese, and checked through back-translations. Participants completed the scale in class-room groups.

Results

Exploratory factor analysis

Preliminary analyses showed significant cultural differences in all the closeness types. Because we were interested in factors that reflect the general within-culture structure, and not interested in sex differences, mean differences between cultures (and sexes within cultures) were removed from items by linear transformations. Our exploratory factor analysis used the principal axis factor extraction method. A scree plot suggested that three factors describe the data well. The three initial factors accounted for 36%, 13% and 11% of the variance, while each of the next six factors accounted for 6% to 3%.

A varimax rotation revealed three factors with items clearly loading on different ingroups: family (factor 1), relatives (factor 2), and friends (factor 3). All relevant items loaded at least .52 on the appropriate factor, and all other items loaded less than .31 (see Table 1). These factors sort items cleanly by ingroup rather than by closeness type or some other content, providing a conceptual replication of the importance of ingroups in Rhee *et al.* (1996) and other studies cited above. This result is particularly striking because items are organized in the scale by closeness type, not by ingroup.

These first three factors replicated fairly well within each culture. For the total sample, the first three factors accounted for 54% of the variance, and the average loading of ingroup-

In the questions below, you will describe how close you are to these groups. You will do this using the scale below. In each of the seven pairs of circles, one circle represents you, and the other represents the group or another person. You will circle the pair that best describes your relationship with the group.

This is the scale for your closeness to a group:

Figure 1 The Venn diagram “Circles of Closeness” response scale

Table 1 Loadings over .30 on factors from exploratory factor analysis of the 21 Circles of Closeness items

Item		Factor 1 Family	Factor 2 Relative	Factor 3 Friends
General,	Family	.761		
General,	Relatives		.775	
General,	Friends			.783
Emotion,	Family	.789		
Emotion,	Relatives		.785	
Emotion,	Friends			.758
Support,	Family	.700		
Support,	Relatives		.790	
Support,	Friends			.713
Identity,	Family	.701		
Identity,	Reativesl		.711	
Identity,	Friends			.720
Reputation,	Family	.521		
Reputation,	Relatives		.605	
Reputation,	Friends			.561
Similar,	Family	.606		
Similar,	Relatives		.643	
Similar,	Friends			.666
Harmony,	Family	.793		
Harmony,	Relatives	.306	.571	
Harmony,	Friends			.574

appropriate items was .692. For Euro-Americans, these figures were 60% and .707. For Asian-Americans, they were 62% and .701; for Dutch, 60% and .593; for Turks, 48% and .529; and for Japanese, 54% and .659. The apparent similarity of these factor structures also suggests the absence of major problems in translating these scales from English.

The first three factors described the Turkish sample most poorly, so we looked at the first five factors (58% of variance). These also reflected ingroups. Two factors loaded highest on family items, and on either emotional and supportive closeness (mean loading .726) or on the other closeness types (mean = .513). One factor loaded on relatives (mean = .581), and two factors loaded on friends, on either general, emotional and supportive closeness (.749), or on the other four types (.679). Thus ingroups remained central, but for the two ingroups with the highest closeness overall (see below), emotional and supportive closeness formed one factor and the other four specific types formed another. None of the other samples showed this pattern, suggesting that closeness to ingroups (and perhaps collectivism) among the most collectivist samples varies in kind.

Reliability

One can ignore the factor structure shown in Table 1 and treat all items as belonging to a single measure of closeness. This produces a 21-item scale with an alpha reliability of .909 ($N = 318$). If one constructs subscales for the ingroups of family, relatives, and friends (corresponding to the three factors above), the resulting seven-item scales have reliabilities of .88 or .89 ($Ns = 360$). If one constructs subscales for the seven types of closeness –

general, emotional, supportive, identity, reputational, similarity, and harmony – the resulting three-item scales have reliabilities in the high .50s to mid-.60s ($Ns = 360$). Of course shorter scales are less reliable. Applying the Spearman-Brown formula to these reliabilities, and calculating what the reliabilities would be if all the scales had ten items shows that the 21-item scale has a theoretical ten-item reliability of .83; the three ingroup scales' theoretical alphas are .91 or .92; and the seven closeness type alphas range from .83 to .87.

The correlations among the three ingroup subscales varied from .35 to .53 and averaged .42. Correlations among the seven closeness-type subscales varied from .47 to .74 and averaged .58. Thus even though the 21-item scale has high reliability, closeness to different ingroups, and closeness of different types, are not synonymous.

Meanings of closeness

One might ask whether the meanings of “closeness” differ by ingroup and culture. Because subjects rated general closeness first and then rated the six specific types of closeness, we can address this question by looking at the correlations between general closeness and the specific closeness types for each ingroup and culture. We can also examine the similarity of these r s' means and ranges, between cultures, for additional evidence that the scales translated reasonably well. For Euro-Americans, the mean r was .62 and r s varied from .27 to .80. For Asian-Americans, these figures were .58 and .18 to .80; for Dutch, .54 and .21 to .80; for Turks, .55 and .33 to .73; and for Japanese, .56 and .42 to .71. Thus these r s' mean and range are similar for each culture, again suggesting adequate translations.

Averaged over all ingroups and cultures, the highest mean r was with emotional closeness (.71), followed by supportive (.64) and identity (.58) closeness, harmony (.56), similarity (.52), and reputational closeness (.43). The mean r for each ingroup was also highest with emotional closeness, and was lowest with reputational closeness. This suggests that general closeness usually meant emotional and supportive closeness. (It is also possible that these r s are higher because emotional and supportive closeness were rated immediately after general closeness was rated. Future research should address possible artifacts of scale order.)

However (ignoring possible order artifacts), these analyses obscure interesting differences between cultures in the meaning of general closeness. Table 2 shows β weights $> .20$ from simultaneous multiple regressions of general closeness on the six specific closeness types, for each ingroup and culture, as well as the multiple R for each. Although emotional closeness dominates (as noted above), other types of closeness make independent contributions to the meaning of general closeness. There also appear to be differences between cultures and ingroups in what contributes to this meaning. To test this more directly, we compared cultures' zero-order r s between general and specific closeness types, using Fisher's r to z transformation, for each ingroup.

Ten of the 60 comparisons for family (17%) reached the $p < .05$ (2-tailed) level. The r with emotional closeness was higher for Euro-Americans (.80) and Asian-Americans (.74) than for Turks (.60). The r with supportive closeness was higher for Euro-Americans (.77) and Dutch (.76) than for Japanese (.57) and Turks (.50). And the r with harmony was higher for both U.S. samples (.76 and .77) than for Japanese (.53) and Turks (.51). Thus undefined “closeness” to family was more synonymous with emotional and supportive closeness, and with harmony, for Euro-Americans than for Japanese or Turks.

Eleven of the 60 comparisons for relatives (18%) were significant. The r with supportive closeness was higher for both U.S. samples (.77 and .73) than for Japanese (.52), and was

Table 2 Meanings of closeness: β s > .20 for each closeness type on general closeness, by ingroup and culture

Ingroup Culture			Closeness type				Multiple R
	Emotion	Support	Identity	Reputation	Similarity	Harmony	
Family							
Euro-Am.	.364**	.274**				.254*	.873
Asian-Am.	.357**					.431*	.816
Dutch	.270**	.518**					.818
Turks	.315**		.224		.261*		.665
Japanese	.295**	.238**	.402**				.778
Relatives							
Euro-Am.	.252**	.324**				.216*	.875
Asian-Am.	.346**	.220					.862
Dutch	.399**	.284					.728
Turks	.359**		.280**				.783
Japanese	.474**						.779
Friends							
Euro-Am.	.478**		.201			.263**	.762
Asian-Am.	.510**	.325*					.839
Dutch	.551**						.843
Turks	.231	.497**			.203		.804
Japanese	.334**	.210*					.785

Note

* $p < .05$, ** $p < .01$.

higher for Euro-Americans than for Turks (.59). The r for identity closeness was higher for Asian-Americans (.72) than for Japanese (.52) or for Dutch (.43). The r with reputational closeness was higher for both U.S. samples (.64 and .61) than for Dutch (.21), and was higher for Euro-Americans than for Japanese (.42). And the r for harmony was higher for both U.S. samples (.72 and .65) than for Dutch (.37), and was higher for Euro-Americans than for Turks (.49). Thus undefined closeness to relatives was more synonymous with supportive and reputational closeness, and with harmony, for the U.S. samples than for some others. In contrast, the Dutch were least likely to interpret it as identity or reputational closeness or harmony.

Seven of the 60 comparisons for friends (12%) were significant. The r for emotional closeness was higher for Dutch (.80) than for Euro-Americans (.65). The r for supportive closeness was higher for Asian-Americans (.75) and Turks (.74) than for Euro-Americans (.49). The r for reputational closeness was higher for Japanese (.52) than for Euro-Americans (.27). And the r for similarity was higher for Dutch (.59), Euro-Americans (.57), and Japanese (.51) than for Asian-Americans (.18). Thus undefined closeness to friends was less likely to mean emotional, supportive, and reputational closeness to Euro-Americans than to at least one other culture; and it was less likely to mean similarity to Asian-Americans than to most other cultures.

Although a few of these differences may be due to chance, many of them are likely to replicate. The central point is that the meaning of undefined or general "closeness" varies as a function of both culture and ingroup.

Analyses of variance

Prior analyses suggest that both culture and ingroup are important sources of variance in the Circles of Closeness items. To test this directly, we analyzed the data in a 5 (Culture) $\times$ 2 (participants' Sex) $\times$ 3 (Ingroup) $\times$ 7 (closeness Type) ANOVA, with the last two factors within subjects.

Main effects. Of the two between-subjects factors, only culture produced a main effect, $F(4,348) = 6.37, p < .001$. Mean closeness (averaged over ingroups and types of closeness) was lower for the Japanese (4.15) than for all others: Turks (4.79), Asian-Americans (4.75), Euro-Americans (4.59), and Dutch (4.56), $ts(>130) > 3.12, ps < .002$.² There was neither a main effect for subject sex, $F(1,348) < 1.0, p > .50$, nor a Culture $\times$ Sex interaction, $F(4,348) = 1.76, p > .13$.

The Japanese sample's low score is surprising in view of the usual description of Japan as a collectivist or interdependent society. There are four possible explanations. (1) Perhaps closeness to important ingroups is not central to collectivism or interdependence in general, contrary to our central hypothesis. (2) Perhaps Hofstede's Japanese results depend on assessing closeness to work groups, rather than to the ingroups we used. (3) Perhaps closeness is not central to Japanese collectivism. Kashima, Yamaguchi, Kim, Choi, Gelfand, and Yuki (1995) found that their Japanese sample was lower on "relatedness" than their samples from the U.S., Australia, Hawaii, and Korea, where relatedness was measured by Hamaguchi's items designed to tap "kanjin-shugi" or "between-people-ism." The items seem to be similar to our emotional and supportive closeness. Matsumoto *et al.* (1997) found that Japan was least collectivist of all their cultures toward family. Kitayama (1998) also reported that his Japanese sample was very low on closeness, measured by an Aron-type Venn diagrams scale. (4) Finally, perhaps this is an artifactual result of a moderation response style among Japanese, in which there is a reluctance to use extreme scale values (e.g., Hui & Triandis, 1989; Kashima, Siegal, Tanaka, and Kashima, 1992, p. 117). On five of the 21 scales, the Japanese sample's variance was smaller than the Euro-American's ($F_{\max}$ test $ps < .05$). Choosing among these explanations must await evidence from future research.

Both within-subjects factors produced main effects. The largest was for the ingroup, $F(2,696) = 440.31, p < .001$, replicating the importance of ingroups found by Rhee *et al.* (1996) and others. Participants reported being closer to family (5.28) and friends (4.99) than to relatives (3.44). All these means differ reliably, $ts(357) > 4.57, ps < .001$. There was also a main effect for closeness Type, $F(6,2088) = 60.42, p < .001$. Supportive closeness (4.88) and harmony (4.85) were highest. Both were higher than general closeness (4.76), $ts(357) > 2.00, ps < .045$, and higher than the lowest four – emotional (4.64), identity (4.42), and reputational closeness (4.42), and similarity (4.02), $ts(357) > 4.26, ps < .001$. General closeness was higher than the lowest four, $ts > 3.01, ps < .003$. Emotional closeness was higher than the lowest three, $ts > 3.85, ps < .001$. And identity and reputational closeness were higher than similarity, $ts > 6.42, ps < .001$. Note that the prominence of emotional closeness in the meaning of general closeness (Table 2) does *not* imply that people felt closest emotionally.

Interactions. All three two-way interactions not involving sex reached the $p < .001$ significance level.³ For Culture $\times$ Ingroup, $F(8,696) = 3.35$; for Culture $\times$ Closeness type, $F(24,2088) = 4.21$; and for Ingroup $\times$ Type, $F(12,4176) = 33.73$. Note that this last one is clearly the largest two-way interaction, suggesting that ingroup and type of closeness are

Figure 2 The Ingroup × closeness type interaction

more important than culture in these two-way effects. The Ingroup × Type interaction is shown in Figure 2. Reputational closeness is higher for family and relatives, and lower for friends, than the main effects of ingroup and type can account for. That is, people felt more reputationally connected to family and relatives than to friends, who are an achieved rather than ascribed ingroup. Figure 2 also shows that harmony with family is lower, and with friends higher, than the main effects account for. If harmony with friends is lost, they are no longer friends. Family, on the other hand, are always family; and harmony with them may be lower than with relatives because family are most intimately involved in daily living.

The Culture × Type interaction occurred because, although closeness types differed within every culture ($F_s > 9.0$, $p_s < .001$), their orders differed. We cluster analyzed the cultures, using their mean closeness types, and a squared Euclidean distance measure and the between-groups agglomeration method of forming clusters. The Euro-Americans and Dutch were most similar, and were the only *pair* of cultures that did not yield a highly significant ($p < .005$) Culture × Type interaction; $F(6,882) = 1.90$, $p < .078$. Both were highest on general, emotional, and supportive closeness and harmony; intermediate on identity closeness; and lowest on reputational closeness and similarity. (See Table 3 for paired comparisons of “All three” means.) Asian-Americans and Turks formed a less similar cluster (with three times the squared Euclidean distance of the first cluster). They were highest on general, supportive and reputational closeness and harmony; intermediate on identity closeness; and lowest on similarity. However, they differed on emotional closeness (Asian-Americans low, Turks high). The Japanese differed from all others (joining them at nine times the first cluster’s distance). They were highest on harmony; lowest on similarity; and intermediate on all other types. Thus the ordering of closeness types in our two collectivist samples, Turkey and Japan, differed quite sharply, 2×7 $F(6,924) = 3.71$, $p < .001$.

There was also a significant Culture × Ingroup × Type interaction that qualified all of these two-way effects, $F(48,4176) = 2.00$, $p < .001$. (See Table 3 for means and marginals.) In order to understand this complex $5 \times 3 \times 7$ interaction, we decided to consider the large Ingroup × Type interaction in Figure 2 (and the main effects of ingroup, type, and culture

Table 3 Means and marginal closeness for the Culture $\times$ Ingroup $\times$ Type interaction

Culture Ingroup			Closeness type				
	General	Emotional	Supportive	Identity	Reputation	Similarity	Harmony
Euro-Americans							
Family	5.53	5.24	5.71	5.19	4.97	4.18	5.14
Relatives	3.75	3.45	3.95	3.26	3.35	2.68	3.84
Friends	5.55	5.42	5.51	5.02	4.38	4.62	5.63
All 3	4.94a	4.70bc	5.06a	4.49cd	4.23d	3.83	4.87ab
Asian-Americans							
Family	5.17	4.80	5.76	5.48	6.13	4.83	5.11
Relatives	3.59	3.22	4.04	3.18	3.94	3.09	4.06
Friends	5.57	5.36	5.67	5.03	4.64	5.02	6.05
All 3	4.77bc	4.46d	5.16a	4.56cd	4.90ab	4.31d	5.07ab
Dutch							
Family	5.44	5.54	5.84	5.01	4.93	4.50	5.37
Relatives	3.54	3.47	3.45	3.05	3.14	2.86	3.91
Friends	5.36	5.32	5.46	4.91	4.23	4.86	5.67
All 3	4.78a	4.78a	4.92a	4.32	4.10b	4.07b	4.98a
Turks							
Family	5.86	6.17	5.97	5.71	6.08	5.07	5.19
Relatives	3.93	4.01	3.80	3.36	4.02	3.19	3.82
Friends	5.26	5.03	5.11	4.77	4.39	4.52	5.38
All 3	5.02a	5.07a	4.96a	4.61b	4.83ab	4.26	4.80ab
Japanese							
Family	5.03	4.92	5.25	5.08	5.14	4.29	5.17
Relatives	3.13	3.02	3.15	2.76	3.36	2.66	3.33
Friends	4.66	4.59	4.46	4.55	3.58	3.95	5.03
All 3	4.28ab	4.18b	4.29ab	4.13b	4.03b	3.63	4.51a
All Cultures							
Family	5.41	5.33	5.71	5.30	5.45	4.57	5.19
Relatives	3.59	3.44	3.68	3.12	3.56	2.90	3.79
Friends	5.28	5.15	5.24	4.85	4.24	4.59	5.55

Note: These are means of cell means, thus weighting sexes and cultures equally, as was done in MANOVAs. In rows for "All 3" ingroups, means sharing a subscript do not differ at the $p < .01$ level.

described above) as given, and to examine the data in terms of deviations from the pattern shown in Figure 2.⁴ To calculate deviation scores, cell means from the Ingroup $\times$ Type interaction were subtracted from each data point in that cell. Effects of culture were also subtracted from each appropriate data point. In effect, we removed the Ingroup $\times$ Type interaction and the three main effects from the data. Then these deviation scores were subjected to a series of analyses.

The full $5 \times 2 \times 3 \times 7$ (Culture $\times$ Sex $\times$ Ingroup $\times$ Type) ANOVA of these deviation scores yielded two effects, both familiar: Culture $\times$ Type, $F(24,2088) = 4.28$ (see above); and Culture $\times$ Ingroup $\times$ Type, $F(48,4176) = 2.34$; $ps < .001$.⁵ This three-way interaction means that even after removing the Ingroup $\times$ Type interaction and the main effect of culture, there were cultural differences in the Ingroup $\times$ Type interaction. The easiest way to understand these is to describe how the cultures differed from the pattern shown in Figure 2.

Cultural deviations from the Ingroup $\times$ Type interaction. Deviation scores were computed as describe above. Three-way MANOVAs within cultures showed significant ($p < .05$) Ingroup $\times$ Type effects for every culture except Asian-Americans, where $p < .069$. A cluster analysis of the cultures' 21 deviation scores was done to see which cultures were most similar. The Euro-Americans and Dutch formed the first, tightest cluster. Turks and Japanese formed another cluster at twice the Euclidean distance of the first. Asian-Americans joined this second cluster at 3.6 the distance of the first cluster, and the two resulting clusters joined at 3.7 of that distance. Thus there was a tight individualist cluster (Euro-Americans and Dutch) and a looser collectivist cluster with Asian-Americans as the outliers there.

T-tests were done to see which deviation scores differed from zero, and thus from the pattern in Figure 2, within each culture. There was less reputational closeness to family than expected among Euro-Americans, $t(74) = 2.48$, $p < .02$, and Dutch, $t(73) = 3.86$, $p < .001$. The Dutch also showed less reputational closeness to relatives, $t = 2.84$, $p < .01$. Euro-Americans showed less similarity to family, $t = 2.19$, $p < .05$.

There was high reputational closeness to family among Turks, $t(58) = 2.59$, $p < .02$, and Asian-Americans, $t(54) = 3.55$, $p < .001$, and to relatives among Japanese, $t(96) = 2.70$, $p < .01$. Emotional closeness to family was high among Turks, $t = 4.53$, $p < .001$, but low among Asian-Americans, $t = 2.71$, $p < .01$. Turks also showed low supportive closeness from friends, $t = 2.22$, $p < .05$. Finally, Japanese were high on identity closeness and harmony with family, $t_s = 2.24$ and 2.96 , $p_s < .05$ and $.01$, respectively; and similarity to relatives, $t = 2.48$, $p < .02$.

Thus, relative to the general Ingroup $\times$ Type interaction in Figure 2, fairly clear cultural differences emerged. The individualist cultures (Euro-Americans and Dutch) showed more reputational distance from kin, and Euro-Americans also reported less similarity to their immediate families. So they were "individualist" in the sense of being more distant, but this was specific to reputational distance from kin. The "collectivist" cultures were more varied. Reputational closeness to kin unites them. But Turks and Asian-Americans differed sharply in emotional closeness to family. Japanese were uniquely close to kin in several other ways. Note that nine of the 13 differences noted above involved immediate family and three of the rest involved relatives. This supports our initial hypothesis that cultural differences would be clearest for close kin.

Discussion

We set out to examine a new measure of a central aspect of individualism and collectivism: closeness to ingroups. The need for such a measure was suggested by prior research that shows low reliabilities and correlations among existing measures, by the prominence of various types of relationships in such measures, and by differences in relationships with different ingroups. We also sought a measure that is more graphic and less verbal, to minimize translation difficulties and to harness the Venn diagram metaphor for the self in relationships so evident in Markus and Kitayama (1991) and Aron *et al.* (1992).

The result was the Circles of Closeness measure, applied to family, relatives and friends among Euro-American, Asian-American, Dutch, Turkish, and Japanese college students. The scale taps general (undefined) closeness as well as emotional, supportive, identity, and reputational closeness, and similarity and harmony.

Exploratory factor analyses revealed three clear factors accounting for 54% of the variance overall, and at least 48% of the variance within each culture. The factors corresponded to the ingroups, confirming the importance of distinguishing between them.

The scale's alpha reliability is high, whether used as a whole, as ingroup, or as closeness type subscales. Subscales do not correlate so highly as to be redundant.

Undefined closeness correlated most highly with emotional and supportive closeness overall, but this varied with ingroup and culture. For example, closeness to family meant harmony and emotional and supportive closeness more to Euro-Americans than to Japanese or Turks. Closeness to relatives most strongly implied support, reputation and harmony to U.S. samples, and least strongly identity, reputation and harmony to the Dutch. Closeness to friends was least likely to involve emotions, support and reputation for Euro-Americans, and least related to similarity for Asian-Americans.

Analyses of variance demonstrated the significance of all these factors' interaction with each other, as well as main effects related to our initial hypotheses. We expected cultures to vary in overall closeness as they did in Hofstede's (1980) data on individualism, with Euro-Americans and Dutch most distant, Japanese and Turks closest, and Asian-Americans in between. Except for the Japanese, this pattern received support for kin ingroups but not for friends. We expected and found stronger support for this pattern with kin than non-kin ingroups, but were surprised that there was simply no support with friends. Most unexpected, however, was the uniformly low closeness among Japanese. Although this is not unprecedented in the literature (e.g., Kashima *et al.*, 1995; Matsumoto *et al.*, 1997), it conflicts with most descriptions of Japan as a collectivist culture (see Lebra (1976), esp. ch. 2 on "Belongingness").

The ANOVA interactions revealed several interesting results. First, and as might be expected, relative to other closeness types for these ingroups, reputational closeness was lower for friends than for others (see Figure 2). That is, across these five cultures, one's reputational self is less tied to friends than to immediate and extended family members. This suggests that, at least in early adulthood, people believe they are known less by "the company they keep" than by who their family is. Second, harmony was high with friends and low with family, relative to other types of closeness with these ingroups. Harmony may be the *sine qua non* of voluntary groups, such as friends, and therefore relatively less essential for involuntary ingroups, such as family and relatives.

Third, averaged over cultures, supportive closeness to family was higher than other types of closeness to family. Similarly, harmony was higher with relatives and with friends than other types of closeness to these groups. This demonstrates again that different kinds of closeness characterize relationships with different ingroups.

Fourth, cultures differed in how they diverged from the general Ingroup $\times$ Type interaction shown in Figure 2. These deviations were most similar for Euro-Americans and Dutch, again suggesting more variation among the collectivist samples. Euro-Americans and Dutch were more reputationally distant from kin than the two-way interaction reflects, while the collectivist samples were reputationally closer to kin. But Turks were emotionally closer to family while Asian-Americans were more distant, and Japanese were closer to kin in other ways. Most of these differences concerned family, suggesting that relationships with family are more culturally distinctive than relationships with friends, at least for college students.

Differences between the Japanese and Turkish samples emerged repeatedly: in overall closeness, in factor analyses within cultures, and in the cluster analyses. All these differences suggest that they may represent two kinds of collectivism, in contrast to the relatively similar individualism of the Euro-American and Dutch samples.

The more general point is that the Circles of Closeness measure produced a wealth of reliable and interpretable findings, demonstrating significant effects *and interactions* between culture, ingroup, and closeness types. The interpersonal self's closeness to others depends on all three, alone and in combination with each other. It remains for future research to examine behavioral correlates of these measures and patterns, but the present results make clear the importance of the distinctions among ingroups and closeness types that are built into the scale.

Reminiscent of Cronbach's (1975) two disciplines of scientific psychology, two traditions seem to have emerged in cross-cultural research. The correlational one focuses on individual differences and seeks systematic patterns across many cultures (e.g., Schwartz, 1992; Triandis, 1995). The experimental one takes culture as the independent variable in "experiments of nature," and seeks differences between (typically two) cultures in phenomena that can plausibly be attributed to unmeasured psychological mediators. Successfully measuring these mediators would strengthen both research traditions by characterizing these mediators more precisely. The present results suggest that these mediators are more complex than most current conceptions of I-C convey. At least one central aspect of collectivism, closeness, seems to be conditional on the particular ingroup and culture involved.

More generally, these results suggest that I-C depends on social context. Kâğıtçibasi (1997) distinguished between two kinds of I-C: normative (concerning attitudes and values), and relational (concerning "interpersonal distance versus embeddedness," p. 36). In her review of the literature, the "psychology of relatedness . . . emerges as a promising area for the cross-cultural study of relational Individualism/Collectivism. This may be an area that comes closest to being *core* Individualism/Collectivism. This is because the extent to which the self is perceived as separate from or overlapping with others is conceptually more basic than any other aspects of Individualism/Collectivism" (p. 40, emphasis in original). Our results suggest that any analysis of relational I-C must consider ingroup and relationship contexts.

Kâğıtçibasi's (1997) distinction between normative and relational I-C may also be useful for reconciling our Japanese sample's low closeness with other evidence of Japanese collectivism. Perhaps Japanese culture is relationally individualist (see ours and others' closeness evidence cited above) but normatively collectivist. Thus while Japanese attitudes, beliefs and norms may tie them closely to each other through expectations and obligations, they may experience their relationships as more distant. The Japanese expressions *jibun ga aru* ("having the self") and *jibun ga nai* ("lacking the self") distinguish between "an individual's awareness of some independence from the group he belongs to . . . [and] the individual's total involvement in the group . . . Japanese often take pride in the freedom of *jibun* and its power to resist social pressure" (Lebra, 1976, p. 156). This distinction, which Lebra sees as central to the Japanese sense of selfhood, may carry something of Kâğıtçibasi's distinction between normative and relational I-C, respectively. How well these two distinctions map on to each other in Japanese culture is an important question for future research.

As current research on I-C shows clearly, there are important cultural differences in how the self is related to others, differences that have profound behavioral implications (e.g., Heine & Lehman, 1997; Iyengar & Lepper, 1999). Our results suggest that a more differentiated view of I-C and of self-other relations would also have profound implications; and that particular ingroups and closeness types, as well as cultures, should be distinguished. The Circles of Closeness measure provides a first step in demonstrating the richness and

reliability of such distinctions. It should also make possible true mediational analyses (Kenny, Kashy, & Bolger, 1998) of many of the ways that “culture” affects self and the behavior of selves with others.

Authors Note

Portions of this research were supported by grant SBR-9319611 from NSF, and a Transcoop grant from the Humboldt Foundation, to the first author. Some of these results were presented at the 1998 annual meeting of the Society of Experimental Social Psychology, as part of a symposium on Social Relationships across Cultures, in Lexington, KY. We wish to thank Marci Gleason, Christine Garcia, Kay Matsouka, and Patrizia Parodi of New York University; Frederick M. Uleman of Japan Research, Inc., Tokyo; and Ayse Üskül of Koç University, Istanbul, for their assistance in collecting and interpreting these data.

Correspondence concerning this paper, and requests for a copy of the Circles of Closeness scale, should be addressed to Professor James S. Uleman, Department of Psychology, New York University, 6 Washington Place, 7th Floor, New York, NY 10003; or to Professor Eun Rhee, Department of Psychology, University of Delaware, Newark, DE 19716. Send e-mail to jim@psych.nyu.edu or Rhee@UDel.edu

Notes

1. Subsequent to this study, we decided to let participants define these two groups by their own cultural standards, because these vary so widely around the world. Thus in the most recent versions of the scale, “FAMILY usually includes your parents and brothers and sisters. It *may* include others (like grandparents) if they live in your home or eat with you almost every day. It *may* include people who are not even related to you, if you really always treat them ‘like family.’ It *might not* include your birth parents (if you have step-parents or only one parent) or brothers and sisters (if you don’t have any) . . . RELATIVES include other people who are biologically related to you or your family, and with whom you have at least some kind of relationship. Do not include relatives you have never met and do not know. And do not include relatives you counted as FAMILY above.” However in the present study, “immediate family” meant a Western nuclear family.
2. These means weight sexes equally. This made a difference only in the Japanese sample, where there were over twice as many women as men. This was also the only sample where women and men differed (4.40 versus 3.90, $t(93) = 2.88$, $p < .007$).
3. In addition, there were two interactions with sex. For Culture $\times$ Sex $\times$ Type, $F(24,2088) = 1.80$, $p < .01$. For Sex $\times$ Ingroup $\times$ Type, $F(12,4176) = 2.38$, $p < .005$. The four-way interaction involving sex did not approach significance, $p > .60$. A description and discussion of sex differences is beyond the scope of this paper.
4. We wish to thank our action editor, Yoshihisa Kashima, for this very useful suggestion.
5. As before, there was also a Culture $\times$ Sex $\times$ Type effect, $F(24,2088) = 1.91$, $p < .005$. The Sex $\times$ Ingroup $\times$ Type interaction had $p > .10$.

References

- Aron, A., Aron, E.N., & Smollan, D. (1992). Inclusion of Other in the Self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 596–612.

- Baumeister, R.F. (1998). The self. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.) *The handbook of social psychology: Vol. I* (4th edn), (pp. 680–740). Boston: McGraw-Hill.
- Cronbach, L.J. (1975). Beyond the two disciplines of scientific psychology. *American Psychologist*, 30, 116–127.
- Fijneman, Y.A., Willemsen, M.E., & Poortinga, Y.H. (1996). Individualism-collectivism: An empirical study of a conceptual issue. *Journal of Cross-Cultural Psychology*, 27, 381–402.
- Fiske, A.P., Kitayama, S., Markus, H.R., & Nisbett, R.E. (1998). The cultural matrix of social psychology. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology, Vol. II* (4th edn), (pp. 915–981). Boston: McGraw-Hill.
- Göregenli, M. (1997). Individualist-collectivist tendencies in a Turkish sample. *Journal of Cross-Cultural Psychology*, 28, 787–794.
- Heine, S.J., & Lehman, D.R. (1997). The cultural construction of self-enhancement: An examination of group-serving biases. *Journal of Personality and Social Psychology*, 72, 1268–1283.
- Ho, D.Y-F., and Chiu, C-Y. (1994). Component ideas of individualism, collectivism, and social organization: An application in the study of Chinese culture. In U. Kim, H.C. Triandis, Ç. Kâğıtçibasi, S.C. Choi, & G. Yoon, *Individualism and collectivism: Theory, method, and applications* (pp. 137–156). Thousand Oaks, CA: Sage.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hui, C.H. (1988). Measurement of individualism-collectivism. *Journal of Cross-Cultural Psychology*, 22, 17–36.
- Hui, C.H., & Triandis, H.C. (1986). Individualism-collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology*, 17, 225–248.
- Hui, C.H., & Triandis, H.C. (1989). Effects of culture and response format on extreme response style. *Journal of Cross-Cultural Psychology*, 20, 296–309.
- Iyengar, S.S., & Lepper, M.R. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, 76, 349–366.
- Kâğıtçibasi, Ç. (1994). A critical appraisal of individualism and collectivism: Toward a new formulation. In U. Kim, H.C. Triandis, Ç. Kâğıtçibasi, S.C. Choi, & G. Yoon, *Individualism and collectivism: Theory, method, and applications* (pp. 52–65). Thousand Oaks, CA: Sage.
- Kâğıtçibasi, Ç. (1997). Individualism and collectivism. In J.W. Berry, M.H. Segall, & Ç. Kâğıtçibasi (Eds.), *Handbook of cross-cultural psychology: Vol. 3, Social behavior and applications* (pp. 1–49). Boston: Allyn & Bacon.
- Kashima, Y., Siegal, M., Tanaka, K., and Kashima, E.S. (1992). Do people believe behaviours are consistent with attitudes? Towards a cultural psychology of attribution processes. *British Journal of Social Psychology*, 31, 111–124.
- Kashima, Y., Yamaguchi, S., Kim, U., Choi, S-C., Gelfand, J.H., & Yuki, M. (1995). Culture, gender, and self: A perspective from individualism-collectivism research. *Journal of Personality and Social Psychology*, 69, 925–937.
- Kenny, D.A., Kashy, D.A., & Bolger, N. (1998). Data analysis in social psychology. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology, Vol. I* (4th edn), (pp. 233–265). Boston: McGraw-Hill.
- Kim, U., Triandis, H.C., Kâğıtçibasi, Ç., Choi, S.C., & Yoon, G. (1994). *Individualism and collectivism: Theory, method, and applications*. Thousand Oaks, CA: Sage.
- Kitayama, S. (1998). Personal communication, October.
- Lebra, T.S. (1976). *Japanese patterns of behavior*. Honolulu: University of Hawaii Press.
- Markus, H.R., & Kitayama, S. (1991). Culture and self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Matsumoto, D., Weissman, M.D., Preston, K., Brown, B.R., and Kupperbusch, C. (1997). Context-specific measurement of individualism-collectivism on the individual level: The Individualism-Collectivism Interpersonal Assessment Inventory. *Journal of Cross-Cultural Psychology*, 28, 743–767.

- Peng, K., Nisbett, R.E., & Wong, N.Y.C. (1997). Validity problems comparing values across cultures and possible solutions. *Psychological Methods*, 2, 329–344.
- Rhee, E., Uleman, J.S., & Lee, H.K. (1996). Variations in collectivism and individualism by ingroup and culture: Confirmatory factor analyses. *Journal of Personality and Social Psychology*, 71, 1037–1054.
- Schwartz, S.H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 25, pp. 1–65). San Diego, CA: Academic Press.
- Stephan, C.W., Stephan, W.G., Saito, I., and Barnett, S.M. (1998). Emotional expression in Japan and the United States: The nonmonolithic nature of individualism and collectivism. *Journal of Cross-Cultural Psychology*, 29, 728–748.
- Triandis, H.C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Tropp, L.R., & Wright, S.C. (1995). Inclusion of ingroup in the self: Adapting Aron & Aron's IOS scale. Paper presented at the annual meeting of the American Psychological Society, June.
- Turner, J.C. (1987). A self-categorization theory. In J.C. Turner, M.A. Hogg, P.J. Oakes, S.D. Reicher, & M.S. Wetherell (Eds.), *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.