

## **FRIENDSHIP PATTERNS AMONG UNIVERSITY STUDENTS IN FIVE CULTURES**

**ROGER BAUMGARTE, NAMI LEE & STEVEN KULICH**

### **ABSTRACT**

The cross-cultural literature has assumed that people in collectivist cultures such as those found in South America and Asia have a more exclusive and interdependent approach to close relationships than people in individualist cultures such as those in North America and Western Europe. People in collectivist cultures, it is thought, focus most of their social needs and energies on a small, tightly knit in-group of family members, work colleagues and friends, and socialize infrequently outside this intimate inner circle. By contrast, people in individualist cultures make less of a distinction between in- and out-group members, preferring to socialize in a more open and superficial manner with a larger variety of acquaintances. Applying this principle specifically to friendship, the cross-cultural literature has asserted that people in collectivist cultures have smaller numbers of friends, and that these friendships are more interdependent and of longer duration than those in individualist cultures. We tested these hypotheses by surveying university students (N = 1,410) in France, Romania, Korea, China and the U.S. Results suggest that people in collectivist cultures do not have smaller numbers of “best” friends, nor do they report that their friendships are of longer duration and greater interdependence. Furthermore, students in the individualist cultures reported more contact, self-disclosure and expressiveness with their best friends compared to students in collectivist cultures. We also found that women reported more self-disclosure and expressiveness than men across all of the cultures in this study. These results suggest a need to reassess commonly held beliefs about how friendships differ over cultures.

### **KEYWORDS**

Friendship, culture, individualism, collectivism, gender

### **AUTHORS' PRESENTATION**

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## **Friendship Patterns among University Students in Five Cultures**

Reviews of cultural differences in close relationships often make the assertion that people in individualist cultures such as those in North America and Western Europe, tend to cultivate a large number of friendships that are less interdependent and of shorter duration than people in collectivist cultures. By contrast, people in collectivist cultures, such as those in Asia and Latin America, tend to have fewer, more interdependent and longer lasting friendships (e.g., Gudykunst & Ting-Toomey, 1988, p. 41; Triandis, 1995, pp. 58-59, 75, & 110). This distinction is made most frequently when close relationships in the U.S. are contrasted with other cultures. The idea that people in the U.S. cultivate larger numbers of superficial relationships compared to peoples in other cultures can be seen in the writings of intercultural communications theorists (e.g., Hall & Hall, 1990; Stewart & Bennett, 1991), anthropologists (e.g., Kluckhohn, 1954), and social commentators (e.g., Bellah, et al., 1985). It is also quite prevalent in guides designed to aid international students coming to the U.S. (e.g. Althen, 1988; Lanier, 1981). These guides suggest that people in the U.S. are warm, open and friendly when first encountered, but that deep, committed friendship is quite rare or difficult to achieve.

Surprisingly, despite the pervasiveness of this assertion, we could find no empirical studies that directly test it with respect to friendship. To our knowledge, no one has asked individuals from multiple cultures about the number, duration or interdependence of their best friendships. In this study, we asked these and other questions to determine how friendships vary over five cultures differing on the dimension of individualism/collectivism (I/C). We will begin by defining the I/C dimension and examining the friendship literature related to this dimension before proposing specific hypotheses to be tested.

According to Hofstede (1991), "Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (p. 51). Most agree that the critical in-group of collectivist societies in Hofstede's definition refers to one's family, clan or tribe. It might also refer to work group or classmates (Triandis et al., 1988). Precisely how it applies to friendship has not been established.

Gudykunst and Ting-Toomey (1988) and Triandis (1995) and others who have asserted that friendships in collectivist cultures, compared to individualist cultures, tend to be fewer in number, more interdependent and of greater duration have found support in the work of Wheeler, Reis and Bond (1989). Using a diary methodology, these researchers found that students in Hong Kong had fewer but longer interactions with fewer people compared to students in the U.S. While this study did not focus specifically on the respondents' best friends, it did provide a picture of the daily social interactions of students in the two cultures. This study implies that people in collectivist cultures take a more selective approach to socializing in general. Our research attempts to document and

extend these findings by looking specifically at best friends in five cultures, including cultures that vary widely on the I/C dimension but are seldom subjects of relationship research.

In comparing the interdependence or closeness of relationships across cultures, one relevant dimension concerns expressiveness and self-disclosure. Most cross-cultural comparisons on this dimension have found that people in individualist cultures are more expressive and self-disclosing than those in collectivist cultures (Chen, 1995; Goodwin & Lee, 1994; Gudykunst & Nishida, 1983; Won-Doornink, 1985; Yum 1987—See Wheeler, et al., 1989, for an exception to this pattern). It may seem paradoxical that people in collectivist cultures, who are assumed to espouse a more exclusive and interdependent approach to friendship, should be less expressive or self-disclosing in their close relationships. This finding, however, is rather persistent in the literature. Related findings seem to corroborate it as well. For example, Ting-Toomey (1991) and Yum and Canary (1997) have found that people in collectivist cultures score lower on measures of relationship maintenance. Relationship maintenance in these studies refers to expressions of trust, encouragement, assurances, but also willingness to help, spend time, etc. with the friend. Thus both self-disclosure and relationship maintenance seem to be more common in individualist cultures than collectivist ones.

From these findings, we can conclude that social behaviors associated with feeling close to someone in a collectivist culture may be quite different from those found in individualist cultures. In individualist cultures, self-disclosure and expressiveness seem to be the critical means of social penetration and relationship maintenance (Altman & Taylor, 1973). By contrast, people in collectivist cultures may take a less active, expressive approach to close relationships. For example, Chang and Holt (1991) and Goodwin and Finlay (1997) have concluded that people in collectivist cultures tend to see all relationships as phenomena over which one has less control than is assumed in individualist cultures. This sense of fatalism, or the Chinese concept of *yuan*, may render the active maintenance of relationships somewhat superfluous in collectivist cultures.

Cultural differences in communication styles may also help explain the lower levels of expressiveness and self-disclosure in collectivist cultures (See Gudykunst, Ting-Toomey, & Nishida, 1996, for a review). According to Hall (1983), people in individualist cultures tend to cultivate a low-context style of communication where great emphasis is placed on verbal expression. Talk is seen as the essential form of communication, and more talk implies better communication and a better relationship. In collectivist cultures, people cultivate a high-context style of communication, where much of what is important to communicate is already well imbedded in the relationship of the interlocutors and need not be expressed verbally. Repeating what is already well understood in a relationship would be inappropriate and uncomfortable.

Triandis (1995) provides yet another explanation for the finding of greater self-disclosure in individualist cultures. He has argued that it is a result of comparisons across cultures that do not take into sufficient consideration in-group/out-group distinction. If we compare only close relationships (i.e., in-group members) across cultures, he asserts, we

should find that people in collectivist cultures self-disclose more than those in individualist cultures. Unlike previous work on self-disclosure, this study is intended to directly test this hypothesis.

It should be pointed out, however, that less expressiveness or self-disclosure is not necessarily incompatible with the assertions made above, that people in collectivist cultures have more exclusive, interdependent and longer lasting relationships. Rather, it is likely that the intimacy of friendship is experienced quite differently in different cultures. In individualist cultures, closeness might stem from expressiveness and frequent reassurances (i.e., relationship maintenance, self-disclosure), whereas in collectivist cultures feelings of closeness might stem from other factors such as loyalty or interdependence.

Our study compared friendship patterns among university students in five cultures, China, South Korea, the U.S., France and Romania. These cultures were chosen because prior research suggests they represent differing points on the I/C dimension. According to the work of the Chinese Culture Connection (1987), Hofstede (1981), and Schwartz (1997), we can conclude that the U.S. and France are the most individualist cultures, and Korea and China the most collectivist cultures in our comparison. Romania is unique in that it is a western culture presumed to have individualist tendencies, but with many years of communist influence, which is assumed to enhance collectivist social patterns. Romania is also of special interest in that little relationship research has been conducted on the countries of Eastern Europe.

Based on the literature cited above, we hypothesized that students in collectivist cultures will indicate fewer individuals as “best” friends (H1). (Although grammatically speaking there can be only one “best” friend, this expression is commonly used in American English to refer to more than one individual. The translations of this expression will be discussed below.) We predicted that students in collectivist cultures would estimate the length of their best friendships to be longer and perceive them as more durable than students in individualist cultures (H2). We hypothesized that respondents in collectivist cultures would report a greater degree of interdependence (H3) in their friendships and less expressiveness and self-disclosure (H4) than those in individualist cultures.

In addition to these four hypotheses, we also thought it relevant to consider gender differences as well. A rather extensive literature exists, most of it done in North America and Western Europe, comparing male and female approaches to friendships. (For reviews of this literature, see Blieszner & Adams, 1992; Fehr, 1996; Rawlins, 1992; Winstead, Derlega, & Rose, 1997.) In general, these reviews have suggested that male friendships tend to be more instrumental and activity oriented, whereas female friendships tend to be more expressive and intimate. Several researchers have cautioned against overstating these gender differences (e.g., Canary, Emmers-Sommer, & Faulkner, 1997; Dindia & Allen, 1992). In a recent study testing a sample of students in the U.S., Bank and Hansford (2000) found that these gender differences are both large and pervasive. No studies could be found comparing gender differences in friendship across a variety of cultures. Consistent with the bulk of the friendship research, we predicted that the women

would report more expressiveness and self-disclosure in their friendships (H5). Comparing the effects of both culture and gender on expressiveness and self-disclosure in the same analyses allows for an assessment of the relative contributions of each variable. Given the lack of cross-cultural research on this issue, we made no specific predictions about the consistency of these gender differences across cultures.

## Method

### Participants

The samples consisted of 1,410 unmarried university students between the ages of 18 and 26 in five cultures with the number of participants for each culture presented in Table 1. The mean ages for these students were: U.S.-20.24 ( $SD = 2.03$ ), France-20.29 ( $SD = 2.02$ ), Romania-21.63 ( $SD = 1.66$ ), Seoul-21.30 ( $SD = 2.19$ ), and Shanghai-21.25 ( $SD = 2.18$ ). The groups of students represent convenience samples, but several strategies were used to enhance their representativeness. The U.S. sample was drawn from 22 states including urban and non-urban universities from all major regions of the country, except for the southwest. Half of the French sample consisted of students from Paris and its suburbs, with the other half from Rennes, Strasbourg and Cannes. The Romanian students came from Bucharest (which draws students from throughout the country) and Cluj. The Korean students were all enrolled in universities in or near Seoul. While these universities draw students from around the nation, the vast majority of these students were from Seoul and its suburbs. The least representative were the students in Shanghai, all of whom were studying at Shanghai International Studies University. Although this institution draws students from throughout China, it is considered to be very Western in orientation, with many of the courses being taught in English. To reflect the latter two groups more accurately, we refer to them as students from Seoul and Shanghai, rather than from Korea and China.

### The Survey

Part 1 of the survey asked students a minimal number of demographic questions: Age, gender, marital status, and nation of birth and childhood. Part 2 asked respondents to focus on a specific “best” friend. We did not define this term for them beyond indicating that they were to choose the person they considered to be their best friend and keep the image of this person in mind, so that their responses to questions that followed reflected the nature of their relationship with this individual. Initial questions were demographic about this best friend, his or her age, gender and the length of their relationship (in years). They were then asked to indicate the frequency of contact with this best friend over the past year using seven-point scale ranging from every day to only once. Contacts could include phone calls, letters, emails or face-to-face contact.

Students were then asked to rate 94 descriptive statements concerning their relevance to this best friend. Responses were on a seven-point Likert scale, with some based on level of agreement: 7 = “strongly agree” to 1 = “strongly disagree” and others on the frequency

with which the statements applied to this friendship: 7 = “often,” 4 = “sometimes,” to 1 = “never.” A representative sampling of the items can be found in Table 2. These statements were derived from the work of Duck (1983), Blieszner & Adams (1992) and Rawlins (1992), and were constructed by the first author to test the hypotheses listed above. Part 3 of the survey simply asked students to indicate the number of people they considered to be “best” friends.

The survey was translated into Romanian, Korean and French, and independently back translated into English following procedures suggested by Brislin, Lonner and Thorndike (1973). The students in Shanghai were enrolled in an English-speaking university and responded to an English version of the survey. The translation of the term “best” friend for Part 3 of the survey was of special significance. The terms used in French were “meilleurs amis,” in Romanian, “‘cei mai buni’ prieteni,” and in Korean, “ch’inhan ch’ingu,” all of which carry strong connotations for exclusivity, and thus, parallel the term “best” friend in American English.

Reliability of these items were determined on an item-by-item basis (Van de Vijver & Leung, 1997). Initial reliability work was based on a sample of 46 students in the U. S. who were re-tested after a six-week delay. The re-test correlations of the items averaged .87, with a range of .67 to 1.00. A similar comparison was made for a group of 42 French students re-tested after a four-week interval, with an average correlation of .86, and a range of .64 to 1.00. Mean scores on each item for the U.S. sample were then correlated with corresponding means for the students in Seoul (.80), Shanghai (.85) and Romania (.92). These coefficients suggest that students in these cultures generally responded to the items in a fashion that was consistent with the responses of students in the U.S. This strategy for assessing reliability of items across cultures is not uncommon (e.g. Triandis et al., 1988, p. 332) and can also be used to infer the consistency of the translations.

#### Data Preparation for Likert-Scale Items

The strategy we used to analyze the 94 Likert-scale items was based on a set of arguments proposed by Leung and Bond (1989) and exemplified in the work of Bond (1988). The goal was to extract a set of factors that would be pancultural, that is, applying equally to all cultures in this comparison. Pancultural factor analyses require equal cell sizes, so we pared down the larger samples through random selection to equal the smallest sample, the Romanian sample, meeting the following criteria: An equal number of male and female students, who focused on a same-sex friend for rating the survey items. We decided to focus only on same-sex friendships to reduce error variation in the data. This process resulted in cells of size 68 for each gender in each culture.

Consistent with arguments by Leung and Bond (1989) and Van de Vijver & Leung (1997) we standardized (or “ipsitized”) responses at the individual level to eliminate differential response biases, and then at the cultural level (“deculturing” the responses) to eliminate the cultural positioning effect on the factor analyses. These procedures strip the data of some of its variability but produce a set of factors that equally represent the five cultures. That is, while there may be emic or country-specific aspects of friendship,

pancultural factor analyses are designed to pull out the common dimensions of respondents' perceptions of their best friends. While cultures may differ in the degree to which they ascribe to any given dimension, the dimensions themselves are "pancultural," representing dimensions of friendship relevant to all cultures.

Separate factor analyses were applied to those items with an agreement-disagreement response format and those that required students to indicate the frequency with which the statements applied to their friendships. The data were first subjected to a maximum likelihood factor analyses and 19 items with low communalities (below .30) were removed. Both sets of items were then submitted to principle components factor analyses, and an examination of the scree plots (Cattell, 1966) suggested that a one-factor solution best represented the results for the agreement/disagreement items, and a two-factor solution for the frequency items. These factors were then subjected to varimax rotations and the results for the agreement-disagreement items and the frequency items are presented in the upper and lower sections of Table 2 respectively. For clarity of exposition, we have numbered the factors 1 through 3. We included only items loading at .5 and above. Loadings on these factors are somewhat lower than what would be ideal, but this is a common result of ipsitizing and deculturing the data set (Bond, 1988). The benefit is the pancultural aspects of these dimensions. We were able to address Hypotheses 3, 4 and 5 by comparing cultural and gender means along these dimensions.

## Results

The first three hypotheses were tested on the full data set of 1410 responses and these results are reported in Table 1. Testing H1, the mean number of "best" friends differed over cultures,  $F(4, 1384) = 28.3, p < .001$ . There was also a main effect for sex with male students reporting 5.3 ( $SD = 4.0$ ) and female students 4.8 ( $SD = 3.3$ ) "best" friends,  $F(1, 1384) = 9.3, p = .002$ . The interaction was not significant,  $F(4, 1384) = 1.0, p = .39$ . Testing H2, with age entered as a covariate, the mean length of their friendships (in years) did not differ over cultures,  $F(4, 1383) = 1.3, p = .25$ . One test of H3, focusing on the level of interdependence among friends, was the amount of contact between friends over the past year (rated on a seven-point scale). Results differed over cultures,  $F(4, 1397) = 40.8, p < .001$ . There was no main effect for sex,  $F(1, 1397) = .1, p = .83$ , nor a Culture x Sex interaction,  $F(4, 1397) = 2.3, p = .06$ .

To summarize these results, first recall that we had predicted that the collectivist cultures of Seoul and Shanghai would indicate a smaller number of "best" friends, longer duration of their friendships and a greater amount of contact compared to the individualist cultures of the U.S. and France. Neither the number of "best" friends, the length of their friendship, nor the amount of contact with their best friend varied systematically with the I/C dimension as predicted. With respect to the number of "best" friends, students in Seoul reported the largest number, and students in the U.S. the smallest number, an outcome that was the opposite of our prediction. With respect to amount of contact, the means for all five cultures differed in the direction opposite of that predicted. Students in individualist cultures (France and the U.S.) reported more contact

with their best friends over the last year than did students in collectivist cultures (Seoul and Shanghai), with the Romanian mean falling between these two polls.

Testing other aspects of H3 (interdependence), H4 (culture differences in expressiveness and self-disclosure) and H5 (gender differences in expressiveness and self-disclosure) requires us to look at the results of the pancultural factor analyses. These analyses were performed on the data set that had been both ipsitized and decultured and contained 136 respondents from each culture. Since deculturing the data eliminates cultural differences on each item (Leung & Bond, 1989), to compare the five cultures on each of the factors, we used the data set that was ipsitized, but not decultured. Following suggestions by Bond (1988), scores for each factor were derived by simply summing over the items derived from the pancultural factor analysis, respecting the signs of the factor loadings. These means are broken down by gender and presented in Table 3. We adapted the .01 level of significance to reduce the probability of a Type I error.

We have labeled Factor 1 Commitment since it reflects items that suggest the respondent expects the friendship to last long in the future, overcoming conflicts and geographical distance when necessary. A comparison of the means on this dimension over cultures resulted in no main effect for culture,  $F(4, 670) = 1.4$ ,  $p = .22$ , no main effect for sex  $F(1, 670) = 0.2$ ,  $p = .67$ , and no Culture x Sex interaction,  $F(4, 670) = 2.6$ ,  $p = .03$ . Items in this factor are relevant to H2, the perceived durability of the relationship, and H3, interdependence in the friendships, but the lack of a cultural main effect does not permit us to infer a cultural difference on these two dimensions.

We have labeled Factor 2 Talk and Emotions. Three of the items concern talk and two with emotional exchanges. A comparison of the means on this dimension over cultures resulted in a main effect for culture,  $F(4, 670) = 6.9$ ,  $p < .001$  ( $\eta^2 = .04$ ), a main effect for sex  $F(1, 670) = 77.0$ ,  $p < .001$  ( $\eta^2 = .10$ ), and no Culture x Sex interaction,  $F(4, 670) = 2.0$ ,  $p = .09$ . An inspection of the means in Table 3 indicates that France and the U.S. (individualist cultures) scored higher on this dimension than the other three cultures, and women scored higher than men. Comparing gender means for each culture showed this difference was significant in the U.S.,  $t(116) = 5.65$ ,  $p < .001$ ; in France,  $t(123) = 3.27$ ,  $p = .001$ ; in Seoul,  $t(113) = 4.86$ ,  $p < .001$ ; and in Shanghai,  $t(122) = 4.21$ ,  $p < .001$ ; but not in Romania,  $t(134) = 1.80$ ,  $p = .08$ . This dimension supports H4 that respondents in collectivist cultures report less expressiveness and self-disclosure in their friendships than those in individualist cultures. It supports H5 that females are more expressive in their friendships than males.

We have labeled Factor 3 Helping and Correction since five out of the six items concern helping the friend in various ways, while one of the items suggests that the best friend tells the respondent how to behave appropriately. A comparison of the means on this dimension over cultures resulted in no main effect for culture,  $F(4, 670) = 2.2$ ,  $p = .07$ , no main effect for sex  $F(1, 670) = 0.8$ ,  $p = .38$ , and no Culture x Sex interaction,  $F(4, 670) = 1.2$ ,  $p = .31$ . As with Factor 1, items in this factor are relevant to H3 (interdependence), but the lack of a cultural main effect does not permit us to infer a cultural difference on this dimension.

## Replications

Given the post-hoc nature of the pancultural factor analyses (Gorsuch, 1997), we wanted to know if the pattern of cultural and gender differences for the three factors would persist if the comparisons were made across the full data set ( $N = 1410$ ) where 13% of the respondents focused on a cross-gender best friend. These results precisely replicated the pattern of significant differences in the earlier comparisons with the following exception. Factor 2 (Talk and Emotions) which, in addition to the two main effects found earlier, produced a significant Culture  $\times$  Sex interaction. In these analyses, the gender differences were significant in all cultures ( $p < .001$ ), but the size of the differences were larger in the U.S., Romania and Shanghai compared to Seoul and France. We then attempted a similar replication on only those students who were not included in the original comparisons ( $n = 730$ ). In this portion of the sample, 25% of the respondents focused on a cross-gender best friend. These results precisely replicated the pattern of significant differences of the original comparisons with the following two exceptions. Factor 1, (Commitment), which had no significant  $F$  ratios in the original comparisons, produced a significant main effect for sex, with female students scoring higher ( $M = 4.23$ ,  $SD = 2.26$ ) than male students ( $M = 3.76$ ,  $SD = 2.67$ );  $F(1, 722) = 8.8$ ,  $p = .003$ . There was no main effect for Culture,  $F(4, 722) = 1.3$ ,  $p = .26$ , nor a significant Culture  $\times$  Sex interaction,  $F(1, 722) = 1.9$ ,  $p = .11$ . Gender comparisons within each culture produced no specific significant differences,  $t(166) = 2.67$ ,  $p = .03$  for the U.S.,  $t(243) = .85$ ,  $p = .40$  for France,  $t(56) = 2.14$ ,  $p = .04$  for Romania,  $t(92) = 1.32$ ,  $p = .19$  for Seoul, and  $t(91) = 1.26$ ,  $p = .21$ . The second exception was identical to that of the first replication. That is, Talk and Emotions produced a significant interaction reflecting the greater gender differences in the U.S., Romania and Shanghai.

## Discussion

H1 stated that respondents in individualist cultures (the U.S. and France) would indicate a larger number of “best” friends than respondents in collectivist cultures (Seoul and Shanghai). This hypothesis was not supported. In fact, respondents in the U.S., a highly individualist culture, indicated the smallest number of “best” friends while respondents in Seoul, the most collectivist culture in our study, reported the largest number. While these findings were counter to expectations, arguments can be made that support their validity. For example, the mean number of 3.66 “best” friends in the U.S. is consistent with what others have found among student populations in the U.S. (e.g. Johnson & Leslie, 1982). At the same time, Crane (1978) has suggested that having a large number of friends is highly valued in Korean culture.

Relevant to our finding, data gathered by Wheeler et al. (1989) showed that students in the U.S. reported daily social interactions with a wider variety of partners than those in Hong Kong. Their analyses did not separate interactions among best friends from interactions with others who might be merely acquaintances. Our data suggest that within the broad social networks of students in the U.S., the number of people they identify or think of as “best” friends is relatively small. Between the two extreme data points of

Seoul and the U.S., the mean number of “best” friends did not relate systematically to the I/C dimension. After the students in Seoul, the next highest number was given by the French students, and the mean for students from Shanghai came closest to that of the U.S. The statement that people in collectivist cultures cultivate a smaller number of best friends was not supported, and in the case of students in Seoul and the U.S., was clearly refuted.

H2 stated that students in collectivist cultures would estimate the length of their best friendships to be longer and perceive them as more durable than students in individualist cultures. We found no evidence to support this hypothesis. There were no significant differences in the estimates by students in various cultures regarding how long they were best friends with the person they focused on in part 2 of the survey. It is clear that some students chose as a best friend someone they had met on campus indicating that they had known this best friend for only a short time. Others focused on someone from early childhood as a best friend. However, the proportions of these two patterns did not differ over cultures. The items of Factor 1, Commitment, reflect the respondents’ perceptions of the durability or future potential of their friendships. We did not find a significant cultural difference on this dimension as well. Thus, we found no evidence to support the common assertion that friendships are of longer duration in collectivist cultures compared to individualist cultures.

We have three findings relevant to H3 testing for cultural differences in levels of interdependence in respondents’ friendships. First, we asked students to indicate how frequently they have had contact with their best friend over the past year, including phone calls, letters, emails or face-to-face contact. Presuming their greater interdependence, we predicted that students in collectivist cultures would indicate greater frequency of contact. Results were the opposite of expectations. The two individualist cultures (France and the U.S.) reported more contact than the two most collectivist cultures (Seoul and Shanghai), with the responses of the Romanian students falling in between. This finding suggests a lack of support for H3, that friends in collectivist cultures, at least in terms of frequency of interaction, are more interdependent than those in individualist cultures.

Before going on to the other two tests of H3, it is worth comparing our results with those of Wheeler, et al. (1989) on the issue of frequency of contact. Although our methods and focus differed quite radically from theirs, it is worth noting that our results replicate theirs in relevant ways. Combining the results of both studies leads to the conclusion that students in individualist cultures socialize more frequently, with both close friends and casual acquaintances, than their counterparts in collectivist cultures. With respect to H3, finding that respondents in collectivist cultures have significantly less contact with their best friends makes it difficult to justify the assertion that people in collectivist cultures are more interdependent on their best friends than those in individualist cultures.

Factors 1 and 3 provide two additional tests of H3. Factor 1, Commitment, includes items focused on the importance and durability of the relationship, and assistance provided by the best friend. Interdependence in a friendship presumes a strongly committed relationship. The finding of no main effect for culture on this dimension does not allow

us to support H3. Items in Factor 3, Helping and Correction, focus on the instrumental support aspects of the respondents' friendships. Instrumental support is characteristic of dependency in a friendship (Otten, Penner & Waugh, 1988). The finding of no main effect for culture on this dimension does not allow us to support H3.

H4 predicted that students in the individualist cultures would report more expressiveness and self-disclosure than students in collectivist cultures. The items of Factor 2, Talk and Emotions, reflect both intimate self-disclosure and talk of a more general manner. They reflect a clear test of H4, and the main effect for culture was significant in the predicted direction. The individualist cultures of France and the U.S. reported more talk and emotions than did the three other, more collectivist cultures. In the Western social-psychological literature, self-disclosure is nearly synonymous with intimacy (Derlega, Metts, Petronio & Margulis, 1993), as it represents the primary means of social penetration (Altman & Taylor, 1973). Mutual revelations about personal issues serve to reduce uncertainty between potential friends and help them feel closer (Gudykunst & Matsumoto, 1996). It also reflects a form of self-validation since one is typically seeking acceptance or approval for that which has been divulged. Perhaps, as others have also found (Ting-Toomey, 1991; Yum & Canary, 1997), such seeking of approval or acceptance is an aspect of relationship maintenance that is less appropriate in collectivist cultures. Expressions that reflect intimacy and that seek to reinforce a friendship, while of some importance, are simply less of an issue in the maintenance of a close relationship. In addition, Hall (1983) has argued that collectivist cultures tend to practice a "high context" style of communication, implying that it is inappropriate to express that which is commonly understood in the context of a close relationship.

H5 predicted that the women in our samples would report more expressiveness in their friendships than the men. Factor 3 Talk and Emotions also provides a clear test of this hypothesis, and the main effect for gender was significant with women scoring higher than men. This difference was consistent across all five cultures. (The difference was significant for the Romanian students in the two "replications" but not in the original comparison.) Gender accounted for 10% of the variance, the most of any effect in this study, compared to culture, which accounted for 4%. There is controversy in the current literature about the strength or consistency of gender differences in close relationships (e.g., Bank & Hansford, 2000; Burleson, 1997; Vangelisti & Daly, 1997; Vangelisti, 1997; Wood, 1997). These findings suggest one potential gender difference that cuts across at least the five cultures represented in this study. Women reported placing more importance on talk and emotions in their friendships than did men.

## **Conclusions**

We propose three conclusions from this work. First, we found that even focusing only on "best" friendships people in individualist cultures place more emphasis on expressiveness and self-disclosure in their relationships than those in collectivist cultures. While Hall (1983) has argued that such differences reflect low and high context communication styles, Triandis (1995) has asserted that if studies focused only on close relationships, people in collectivist cultures would be more self-disclosing than those in individualist

cultures. Our finding suggests that the tendency for greater self-disclosure among people in individualist cultures extends even to best friends. We interpreted this finding in terms of the greater need for relationship maintenance in individualist cultures where relationship ties are thought to be looser compared to collectivist cultures where close relationships carry stronger connotations of being predetermined or ascribed (Chang & Holt, 1991; Goodwin & Finlay, 1997; Ting-Toomey, 1991; Yum & Canary, 1997).

A second contribution of this study relates to gender differences in friendship. The warnings of Canary, et al. (1997), Dindia and Allen (1992) and others that gender differences in close relationships are often overstated is duly noted. However, we found that women in all of the cultures of this study reported a greater emphasis on talk and emotions than did the men. It is significant that this gender difference was manifest among college students whose lives are relatively unconfined by stereotyped gender roles and responsibilities (Caldwell & Peplau, 1982). This finding resembles a pervasive gender difference in the research literature on close friendship, most of which has been conducted in North America and Western Europe (Bank & Hansford, 2000). Our findings suggest that this characteristic of female friendship, the emphasis on talk and self-disclosure, extends beyond the Western cultures upon which it was originally established.

The third conclusion focuses on critical postulates of the I/C dimension, which is the dominant theoretical framework in the literature comparing social patterns across cultures (Triandis, 1995; Gudykunst, et al., 1996; Kim, et al., 1994). Hardly a cross-cultural study of relationships is published without reference to this construct. Given the lack of cross-cultural research on friendship, we attempted to confirm a common theme within this theoretical framework with respect to friendship. As described in the introduction, researchers from a variety of disciplines have argued that people in individualist cultures, compared to collectivist cultures, tend to have larger numbers of more superficial relationships. Specifically, with respect to friendship, we hypothesized that students in collectivist cultures would report a smaller number of "best" friends, that they would have known them for a longer period of time, and that they would report a greater frequency of contact and interdependence. The fact that we were unable to produce differences in the expected directions on any of these dimensions, and in some cases (number of friends, frequency of contact) found differences in the opposite direction, causes us to reassess how friendship relates to the I/C dimension. At least as measured on a self-report survey, people in individualist cultures compared to more collectivist cultures do not report larger numbers of "best" friendships.

Our data seem to support alternative ways of looking at how close relationships differ across the I/C dimension. For example, Goodwin (1997) and Hsu (1985) have argued that family ties in collectivist cultures are so strong and pervasive in one's life that they supercede and diffuse the influences of all other close relationships including friendships. Thus, by contrast with family ties, people in collectivist cultures might see their friendships as relatively less important. As a result, the perceptions of our students in collectivist cultures concerning the exclusivity, duration and interdependence of their friendships may have been influenced by implied comparisons with their much stronger family ties. By contrast, students in individualist cultures, with looser family ties, might

perceive best friendships as more influential in their lives, thus producing some of the findings running contrary to expectations. Regardless of potential interpretations, there is a lack of prior research on the issue of friendship and the I/C dimension. This fact and the fact that our findings have failed to support and in some cases contradicted some commonly held beliefs on this issue, suggest that future research on friendship must look at its relationship to the I/C dimension more critically.

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Table 1  
Means (and standard deviations) for number of “best” friends, length of friendship (years) and frequency of contact (rated on 7-point scale) for students in each culture.

Group (n)	Number of “best” friends	Length of best friendship	Frequency of contact
U.S.	3.66 (2.60)	4.82 (4.33)	5.71 (1.43)
Males (168)	3.67 (2.66)	4.85 (4.80)	5.87 (1.33)
Females (207)	3.64 (2.55)	4.80 (3.91)	5.58 (1.49)
France	5.65 (3.73)	4.95 (3.80)	5.69 (1.37)
Males (126)	6.25 (4.23)	5.13 (3.85)	5.53 (1.49)
Females (253)	5.35 (3.42)	4.86 (3.78)	5.77 (1.30)
Romania	5.00 (3.97)	4.86 (3.86)	5.45 (1.66)
Males (95)	5.46 (4.47)	5.39 (4.10)	5.27 (1.70)
Females (99)	4.56 (3.40)	4.35 (3.57)	5.63 (1.61)
Seoul	6.43 (4.07)	4.90 (3.20)	5.13 (1.44)
Males (113)	6.86 (4.58)	5.43 (3.60)	5.15 (1.28)
Females (117)	6.02 (3.49)	4.37 (2.66)	5.11 (1.59)
Shanghai	4.82 (3.13)	5.00 (3.35)	4.27 (1.70)
Males (119)	4.96 (3.33)	5.15 (3.41)	4.35 (1.79)
Females (113)	4.68 (2.91)	4.83 (3.29)	4.19 (1.60)

Table 2  
 Factor Structures and Loadings For Likert-Scale Survey Items

Factors and items	Loadings	
Analyses of survey items with agree-disagree response format		
Factor 1: Commitment	Factor 1	
I know that x and I will always be able to overcome our conflicts	.634	
This friendship is an important part of my life	.560	
When I have a problem, x always offers to help without me needing to ask	.549	
Even if we lived at some distance, our friendship would continue	.546	
I can easily picture us as friends 20 years from now	.529	
When we have conflict, we usually find a compromise to overcome the problem	.516	
Analyses of survey items with frequency response format		
Factor 2: Talk and Emotions	Factor 2	Factor 3
X and I share emotional feelings	.638	.042
We spend our time together in conversation	.584	-.069
We talk about our experiences we have had with other friends and acquaintances	.538	.050
I can tell how x is feeling	.528	.260
We keep up with what is going on in each others' lives	.509	.097
Factor 3: Helping and Correction		
I help x with certain tasks	-.069	.612
X tells me when I am making a mistake or behaving badly	.034	.584
X helps me with things I couldn't do alone	.214	.547
X and I combine our efforts on a common project or activity	-.071	.516
I help x with certain tasks	.120	.510
X tries to help me out when I haven't asked for help	.304	.500

Note. For the analyses of items with agree-disagree response format, the percentage of matrix variance subsumed by Factor 1 was 19.4, the Kaiser-Meyer-Olkin Measure of sampling adequacy was .76, and Cronbach's alpha was .80. For the analyses of items with the frequency response format, the percentage of matrix variance subsumed by Factor 2 was 16.9, and by Factor 3, 11.7. The Kaiser-Meyer-Olkin Measure of sampling adequacy was .70, and Cronbach's alpha for Factor 2 was .72, and for Factor 3, .75.

Table 3  
Means (and standard deviations) of the three factors for students in each culture.

Group	Factors		
	1. Commitment	2. Talk and emotions	3. Helping and correction
U.S.	4.74 (2.40)	3.57 (1.98)	2.00 (2.45)
Males	4.17 (2.71)	2.71 (2.11)	1.93 (2.48)
Females	5.32 (1.91)	4.44 (1.39)	2.07 (2.44)
France	4.13 (2.69)	3.87 (1.82)	1.80 (2.33)
Males	4.04 (3.05)	3.38 (2.00)	1.45 (2.29)
Females	4.22 (2.29)	4.36 (1.48)	2.14 (2.34)
Romania	4.47 (2.39)	2.99 (2.02)	1.22 (2.47)
Males	4.52 (2.52)	2.68 (1.96)	1.06 (2.63)
Females	4.43 (2.26)	3.29 (2.04)	1.37 (2.32)
Seoul	4.22 (2.38)	3.11 (2.08)	1.65 (2.64)
Males	4.54 (2.46)	2.31 (2.30)	1.93 (2.94)
Females	3.90 (2.26)	3.92 (1.45)	1.37 (2.29)
Shanghai	4.25 (2.22)	2.87 (2.02)	1.92 (2.31)
Males	4.36 (2.38)	2.18 (2.19)	1.80 (2.12)
Females	4.13 (2.05)	3.56 (1.57)	2.05 (2.49)

Note. Means based on 68 males and 68 females from each culture.