<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Gender differences in self-construal: how generalizable are Western findings?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td>Watkins, DA; Cheng, C; Mpofu, E; Olowu, S; Singh-Sengupta, S; Regmi, M</td>
</tr>
<tr>
<td><strong>Citation</strong></td>
<td>The Journal of Social Psychology, 2003, v. 143 n. 4, p. 501-519</td>
</tr>
<tr>
<td><strong>Issued Date</strong></td>
<td>2003</td>
</tr>
<tr>
<td><strong>URL</strong></td>
<td><a href="http://hdl.handle.net/10722/53497">http://hdl.handle.net/10722/53497</a></td>
</tr>
<tr>
<td><strong>Rights</strong></td>
<td>This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.; The Journal of Social Psychology. Copyright © Heldref Publications.</td>
</tr>
</tbody>
</table>
Gender Differences in Self-Construal: How Generalizable Are Western Findings?

DAVID WATKINS  
Department of Education  
University of Hong Kong, China

CHRISTOPHER CHENG  
Department of Applied Social Studies  
City University of Hong Kong, China

ELIAS MPOFU  
Department of Educational Foundations  
University of Zimbabwe, Harare

SOLA OLOWU  
Department of Psychology  
Obafemi Awolowo University, Ile-Ife, Nigeria

SUNITA SINGH-SENGUPTA  
Indian Institute of Management  
Calcutta, India

MURARI REGMI  
Department of Psychology  
Tribhuvan University, Kathmandu, Nepal

ABSTRACT. The authors used the Twenty Statements Test in 2 studies to investigate gender and country differences in the spontaneous self-descriptions of 811 college students from Hong Kong, India, Nepal, Nigeria, and Zimbabwe and 136 secondary school students from Taiwan and Hong Kong. The authors performed statistical analysis and found no significant gender differences in the percentage of responses classified as belonging to the idiocentric self in either study. However, the authors found significant Country effects in both studies for responses classified as representing the idiocentric self and some aspects of the collective self, and the authors found significant Country × Gender effects involving all 4 categories of the idiocentric self and the collective self for the college students. These findings raise questions about the generalizability of Western findings that males are more likely to espouse an independent conception of self than females. However, as the authors predicted, females were more likely to use small group self-descriptions than their male peers.

Key words: allocentric self, collective self, country, gender, idiocentric self, small groups
THEORISTS HAVE FREQUENTLY ARGUED that components of the self that are salient to individual participants are a function of self-related values that vary with variables such as age (Harter, 1985), gender (Cross & Madson, 1997; Josephs, Markus, & Tafarodi, 1992), and cultural dimensions (such as individualism—collectivism; Kagitciubasi, 1994; Markus & Kitayama, 1991; Triandis, 1989). In particular, some theorists have claimed that the independent construal of self that has been portrayed in the literature and on which the great majority of existing measuring instruments are based is not appropriate at least for American women or for the majority of respondents from non-Western cultures. (In the present study, the terms independent, individualistic, or idiocentric self and the interdependent or collectivistic self will be used interchangeably, as they are typically in the literature.)

The major focus of the present study was to investigate gender differences in self-conceptions in a range of non-Western countries and to provide further evidence of cultural differences in self-construal.

Gender and the Self

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

However, Josephs et al. (1992) pointed out that little attention had been paid in such research to the basis of self-esteem. They proposed that self-esteem is related at least in part to how well an individual feels he or she has satisfied culturally mandated norms that differ with gender. For men, being independent, autonomous, and superior to others is typically expected, whereas for women sensitivity, nurturance, and interdependence are more often expected. Therefore Josephs et al. hypothesized that men are more likely to have self-conceptions based on individualist, independent self-cognitions, whereas self-conceptions of women are more likely to be based on the notion of a collectivist, interdependent self. Josephs et al.

We thank students of M.Ed. Cross-Psychology classes at the University of Hong Kong for their assistance in these investigations. The research was supported by grants to David Watkins by the Committee for Research and Conference Grants at the University of Hong Kong.

Address correspondence to David Watkins, Department of Education, University of Hong Kong, Pokfulam Road, Hong Kong, China; hrfewda@hkcc.hku.hk (e-mail).
supported their hypotheses by three small studies with American college students of psychology. In a recent major review, Cross and Madson (1997) reached similar conclusions. The call by these authors for research that tests the cross-cultural validity of these findings spurred the present study’s research.

Would such hypotheses be confirmed in other cultures? Luk and Bond (1992) concluded, on the contrary, that their sample of Hong Kong male and female university students based their self-esteem on the same underlying dimensions of self-concept. Dhawan, Roseman, Naidu, Thapa, and Rettek (1995) found that culture (United States vs. India in their study) had a much stronger influence on self-concept than did gender. American students made more self-evaluations but fewer social identity statements than did the Indians. Surprisingly perhaps, the Indian men tended to describe themselves more in terms of group identity, whereas the Indian women described themselves more in terms of their personal preferences.

The most impressive study in this area yet, a study by Kashima, et al. (1995), addressed the issue of culture, gender, and the self from the perspective of the individualism—collectivism cultural dimension (Hofstede, 1980). Kashima et al. analyzed the responses to questionnaire measures of individualistic, relational, and collective dimensions of self-construal originally developed from concepts emic to Japanese culture, by a total of about 1,000 introductory psychology students from five cultures: two supposedly individualist (Australia and mainland United States), two thought to be collectivist (Korea and Japan), and one “in-between” culture (Hawaii). Kashima et al. concluded that self-concept differences between cultures were primarily due to differences in the degree to which their respondents saw themselves as acting as independent agents (Idiocentric), whereas gender differences were primarily due to differences in the extent their respondents thought of themselves as emotionally related to others (Allocentric). However, the validity of the Japanese-derived instruments for the other cultures can be questioned just as can the use of Western instruments in Asia. Moreover, once again the collectivist cultures were Asian, and two British heritage countries were the individualist cultures. Would the same findings be true of a wider sampling of individualist and collectivist cultures?

Cultural Dimensions and the Self

Now, considerable evidence exists of cross-cultural differences in the nature of self-concept. For instance, respondents from the United States have appeared typically to provide self-descriptions that are qualitatively different from those of respondents from India, China, and Japan (Bond & Cheung, 1983; Cousins, 1989; Dhawan et al., 1995; Ip & Bond, 1995; Shweder & Bourne, 1982). Moreover, recent in-depth studies of indigenous self-conceptions have provided different models of self than those developed in the Western studies (for example, Mpofo, 1994, for Africa; Ho, 1993, for China).

According to Triandis (1972, 1989), people who speak the same language
and who interact regularly tend also to share feelings and thoughts about what they believe and how they should behave. Triandis refers to this phenomena as a cultural group’s *subjective culture*, which might well differ from that of people who speak a different language or live far apart either geographically or temporally. Although all people probably have complex selves containing private, collective, and public cognitions, cultures tend to vary in the importance that they place on the various components (see also Markus & Kitayama, 1991). Triandis (1989, 1990) has proposed that in individualist cultures, idiocentric self-conceptions are more likely, whereas in collectivist cultures the self is more likely to be relational in nature with group cognitions prominent.

However, as discussed earlier in the present study, much of the empirical support for such claims has come from contrasting findings from emic studies of the self in a non-Western society with Western models of self or two-country etic-type research studies (typically of the United States vs. India, China, or Japan). Such studies do support the notion of cross-cultural differences in self-concept but are inadequate for demonstrating that a generalizable cultural dimension such as individualism–collectivism underlies such contrasting findings (Bond, 1994; Leung, Bond, & Schwartz, 1995; Triandis, 1990). As Bond; Leung, Bond, and Schwartz; and Triandis argue, a minimum test of such a dimension would involve two individualist and two collectivist cultures. First, it would be shown that the two individualist cultures are similar to each other, that also the two collectivist cultures are similar to each other, and then that there is a significant difference in accord with the individualism–collectivism dimension in the direction(s) predicted.

Now, we are aware of only two three-culture studies and two larger studies, all but one using spontaneous self-reports based on Kuhn and McPartland’s (1954) sentence completion test known as the *Twenty Statements Test* (TST). In a three-culture study, Bochner (1994) found that, as hypothesized, adults from a collectivist culture (that of Malaysia) gave statistically significantly more group and fewer idiocentric self-descriptions than did participants from the individualist cultures of Australia and Britain. However, the sample size (a total of 78 for the three countries combined) was small for much confidence to be placed in the results. In the second three-culture study, Bond and Cheung (1983) cast doubt on the validity of a simple individualism–collectivism—self-concept relationship: They reported a clear pattern of findings from their university student samples with very similar responses by their individualist (U.S.) sample and one of their collectivist (Hong Kong Chinese) samples; but their other collectivist (Japan) sample was very different. A larger study by Triandis, McCusker, and Hui (1990) that analyzed responses of U.S. (Illinois), Greek, Hawaiian (separated into subsamples of European and Asian backgrounds), Hong Kong, and Chinese psychology college students to the TST, showed that the percentage of the participants’ responses that was linked to a social group increased as expected with the supposed degree of collectivism of the cultural group to which they belonged. Although this finding was as predicted, the TST scoring method used combined possibly distinct aspects of nonidiocentric self-conceptions; three of the groups sampled
were American; and participants were undergraduate college students (except for the people in the sample from the People's Republic of China, who not only were few in number but also were older graduate students). Moreover, possible gender differences in the relationship between the individualism–collectivism dimension and the self-concept were not considered. The results of the current research program and those of the other large study, by Kashima et al. (1995), indicate that this lack of gender difference consideration might be a serious weakness.

Research Considerations

The investigations reported in the present study were part of a research program initiated by D. Watkins that was designed to provide a strong test of the claims that at least some of the self-concept differences between cultures can be explained by underlying cultural dimensions such as individualism–collectivism and that consistent gender differences in the relative salience of individualistic and collectivistic self-conceptions will be found in different cultures.

In planning the current research program, the following considerations were taken into account:

1. Several different methods should be used so that findings are not due to cultural differences in responding to the same method (Triandis, 1990). However, as the focus of the program was the nature of self-conceptions, it was argued that self-reports are the most appropriate form of data but that these should be obtained in different ways in different studies. In the present study, we used the open-ended TST approach, whereas in other studies, the investigators used a quantitative instrument to explore culture and gender differences in the components and the level of self-esteem.

2. Participants of different ages should be involved so that any findings are not age specific. (Western research indicates that the structure and content of self-concept tends to change by age; see, for example, Hattie, 1992.) So, studies were planned to include adolescents, college students, and older adults.

3. As wide a range of cultures as possible should be involved. Thus, D. Watkins contacted several cross-cultural psychologists from a range of countries that either—according to Hofstede's (1980) listing—were clearly near one extreme or the other of the individualism–collectivism dimension or could be sensibly placed on this continuum in a way based on existing research evidence. In particular, we were careful to include collectivist cultures varying by dominant religion, geography, and ethnic backgrounds.

Previous studies in the current research program have seriously questioned the literature claims about culture, gender, and the self-concept. Those studies are summarized below:

1. Watkins, Adair, Akande, Gerong, et al. (1998) used the TST to investigate culture and gender differences in the self-conceptions of 1,580 uni-
versity students from 4 individualist and 5 collectivist countries. Considerable variability was found within countries of both the individualist and collectivist groups as were strong Culture × Gender interactions. Moreover, no support was found for the hypotheses that the participants from the individualist countries would provide more idiocentric responses. The hypothesis that females would provide fewer independent idiocentric self-descriptions but more large group, small group, and allocentric self-descriptions was supported only for the individualist countries.

2. Watkins, Yau, Fleming, et al. (1997) asked 609 middle class adults from the United States, Hong Kong, and Lithuania to rate the importance of and satisfaction with 20 different aspects of their self. Within all three countries there was strong agreement between the sexes about the salience of and satisfaction with these components of the self. However, between-country effects were much stronger than gender effects. Components considered to be aspects of the interdependent self tended to be rated as more salient and to be a greater source of satisfaction than aspects of the independent self in all three countries. Across countries, the U.S. and Hong Kong response patterns were very similar, but the Lithuanian response pattern differed markedly. Perhaps surprisingly, it rated as relatively more important a number of individualistic aspects of the self.

3. Watkins, Adair, Akande, Cheng, et al. (1998) obtained importance ratings for 20 areas of the self from 3,604 first and second year social science undergraduates from 14 countries and 15 cultures. Factor analysis at the Culture × Gender level supported four factors. The resulting factor scores were analyzed for mean differences according to the cultural dimension of individualism–collectivism by gender, and it was found that participants from the 10 collectivist cultures placed greater salience for their self-concepts on “family values” than did those from the individualist cultures. However, this cultural difference was not found for “social relationships.” As in Watkins, Yau, Fleming, et al. (1997), Watkins, Adair, Akande, Cheng, et al. found that the expected gender differences—with females valuing more highly “family values” and “social relationships”—were evident for the individualist countries only. Those latter authors concluded that there might be a strong cultural-level interaction effect between gender and individualism–collectivism on the nature of self-conceptions and that the “family” and “social” aspects of self-concept in collectivist countries need to be considered separately.

4. Two smaller studies looked at gender differences at the secondary school level. In their studies, neither Watkins, Yau, Dahlin, and Wondimu (1997) nor Watkins and Regmi (1996) found males to describe themselves in more idiocentric terms in samples of 165 Hong Kong and 552 urban and rural Nepalese students, respectively.
Research Aims

The aim of the present study was to examine gender differences in the nature of self-construal in samples of college students (Study 1) and secondary school (Study 2) students from a range of collectivist cultures. The main purpose was to test the generalizability to non-Western cultures of the finding from reviews of the Western literature that males are more likely to espouse independent rather than interdependent self-conceptions than females (Cross & Madson, 1997; Josephs et al., 1992).

Further, we wanted to test gender differences involved in a more specific division of the interdependent self into three subcomponents (see Triandis, 1989): the small-group subcomponent (the subcomponent involving a person's immediate family, best friends, etc.); the large-group subcomponent (the subcomponent involving the larger groups with which a person identifies, such as school friends, teammates, or people of the same ethnic or religious group); and the allocentric component (the subcomponent involving the emotional side of relationships such as empathy, friendliness, sensitivity to others needs, etc.). The findings of Kashima et al. (1995) would predict gender differences only in the third subcomponent, with females being more likely to incorporate the emotional side of relationships into their self-conceptions. However, anthropologists have concluded that females in developing countries have limited opportunities for social participation outside of the extended family grouping. Nowhere is this more evident than in Africa, where most clans or tribes have been male-dominated institutions (Bourdillon, 1987). Males have also been more likely to participate in political, professional, and sporting organizations in most—if not all—developing countries (Dhawan et al., 1995; Mpofu, 1994). On the basis of such work, the present study's authors proposed that males are more likely than females to espouse large-group self-descriptions, whereas we proposed that the reverse gender trend is likely to occur for small group self-descriptions.

Other aims of the present study's research were (a) to test whether any gender differences that we found were relatively consistent across the cultures that we sampled (in other words that the Country × Gender interaction is non-significant) and (b) to test for country differences in self-descriptions (main effect for country). Item a was another test of the generalizability of gender differences, and Item b was related to the question of cultural dimensions and the self. Although some differences are to be expected between countries, if an underlying dimension such as individualism—collectivism can explain cultural differences in self-construal (Markus & Kitayama, 1991; Triandis, 1989), then we would expect the main effect for country within supposedly collectivist cultures to be minimal. Moreover, following the reasoning of Triandis, we would propose that countries of relatively similar geographical, religious, economic development, and cultural backgrounds (such as India and Nepal; and Zimbabwe and Nigeria in Study 1) differ less in self-descriptions than different cultures such as Hong Kong and Nigeria.
STUDY 1: COLLEGE STUDENTS

Method

Participants

The participants were 811 first or second year psychology or education stu-
dents from major urban universities, with mean age of 20.51 years (SD = 1.72) from five collectivist cultures: Hong Kong, with 52 men and 63 women; India, with 109 men and 105 women; Nepal, with 37 men and 36 women; Nigeria, with 72 men and 35 women; and Zimbabwe, with 160 men and 142 women. Nepal and India are geographical neighbors that share strong cultural ties based on the Hindu religion (Regmi, 1994). Zimbabwe and Nigeria are both former British colonies in Africa at relatively similar stages of economic development, and they share many cultural values including collectivism (Mpopo, 1994; see also the next paragraph). (The list of Hofstede, 1980, of 50 countries and three regions [the higher the ranking the higher the collectivism] ranked the countries in the present study as follows: Taiwan was 10th; Hong Kong was 16th, India was 27th, East Africa [including Zimbabwe] was 18th–19th; and West Africa [including Nige-
ria] was 13th–14th. Although the above ranking of India may be unduly high—like China and Japan, India has often been treated as an exemplar of collectivist culture [cf. Dhawan et al., 1995].)

The Twenty Statements Test

The TST has been widely used for over 40 years to explore how individuals think about themselves in their own words. The test is considered a valuable tool for understanding spontaneous self-conceptions and how they might vary with variables such as gender and culture (Bochner, 1994; Dhawan et al., 1995; Triandis, 1989). There are a number of different category systems, with from 2 to 59 categories depending on the interests of the researcher (see Wells & Marwell, 1976). This variety complicates the validation of responses to the TST because separate evidence is required for each system. Some investigators have argued that respondents from non-Western, less developed, or non-English-speaking backgrounds might have difficulty in giving 20 responses about themselves and that the responses should be weighted according to the order of response because order indicates the salience in the respondent’s self-conception (Bochner, 1994). However, an earlier study in the current research program using the category sys-
tem used in the present study found not only that the intrarater reliability for the categorization process was high (over .90) but also that non-Western university respondents had no problems with the TST. Moreover, weighting for salience or using less than 20 responses did affect percentages assigned to the same set of categories as used in this study but did not affect conclusions about culture and gender differences (Watkins, Yau, Dahlin, et al., 1997). Scores from the TST were also shown to correlate significantly as predicted with the independent quantita-
tive measure of self-concept used in the current research program (Watkins, Yau, Dahlin, et al.).

Procedure

The respondents were surveyed with the TST in their normal class groups and told that they were taking part in an international study comparing the self-conceptions of people from different cultures. They were asked to co-operate with the research by answering truthfully and were assured that their individual answers would not be identified. They were then asked to read and complete the survey form with the following instructions:

There are twenty numbered blanks on the page below. Please write twenty answers to the simple question “Who am I?” in the blanks. Just give twenty different answers to this question. Answer as if you are giving the answers to yourself, not to somebody else. Write the answers in the order that they occur to you. Don’t worry about logic or “importance.” Go along fairly fast for time is limited.

For the two African and Hong Kong samples the students responded to the above questions in English but in India and Nepal instructions were translated into the relevant local language and checked by back-translation. The students responded in that language. Expert translators who were blind to the hypotheses of the study translated the responses later into English.

Analysis

We used the following criteria, a minor extension of those proposed by Bochner (1994), to code the TST responses. Participants were told to classify each statement into one of the following four categories:

Idiocentric. Statements about personal qualities, attitudes, beliefs, states, and traits that DO NOT relate to other people (e.g., “I am honest”; “I am intelligent”; “I am happy”).

Large group. Statements about large group membership (where many people are involved), demographic characteristics, and large groups with which people share a common fate (e.g., “I am a girl”; “I am a student”; “I am a footballer”).

Small group. As above but a small group, usually the family is involved (e.g., “I am a husband”).

Allocentric. Statements about interdependence, friendship, responsiveness to others, sensitivity to how others perceive you (e.g., “I am a sociable person”; “I am a person who wants to help others”; “I am able to tell when someone is angry with me”).
The TST responses from all participants were randomly divided into six groups. One of six postgraduate education students blind to the hypotheses of this study classified each response by using the category system described earlier (after trial whole group classifications of 20 participants' responses into these categories). Thus for each respondent, each of the 20 responses was classified as either Idiocentric, Large group, Small group, or Allocentric. D. Watkins then calculated each respondent’s totals for these categories (in the few cases where fewer than 20 responses were given or 1 or more responses were unclassifiable, the totals were prorated to give scores totaling 20). To further check the validity of the coder’s classifications, we chose at random the responses of 10 males and 10 females from each country, and then D. Watkins and two other master's-degree students independently classified the responses. We obtained an interrater agreement of over 90% for all categories.

Results

We calculated the means, standard deviations, and percentages of responses for these categories for men and women in all five samples. The percentages obtained and the results of Culture × Gender analyses of variance (ANOVAs) are shown in Tables 1 and 2, respectively (note that because of the ipsative nature of the data, multivariate analysis of variance could not be used). The significance of gender differences within each of the countries sampled is also shown in Table 1. Because of the large number of statistical tests involved, the .01 level of significance was adopted throughout both studies reported here. Effect sizes for both the main and interaction effects are also reported throughout based on the statistic eta squared (Hays, 1981).

It can be seen that the percentage of responses from each of the five country samples classified as Idiocentric varied from 40.5% for Hong Kong men to 65.3% for Nepalese men. We found statistically significant within-country gender differences only for India (Large Group, Small Group, and Allocentric) and Zimbabwe (Large Group and Small Group), but we found 11 of the 12 Country × Gender ANOVA main and interaction effects to be significant. From Table 2 it can be seen that the Country and Interaction effects were particularly strong (with effect sizes ranging from .21 to .39 and .29 to .45, respectively). The implications of these findings are discussed below.

**STUDY 2: SECONDARY SCHOOL STUDENTS**

**Method**

**Participants**

The participants were 136 school students from Taiwan (49 boys; 27 girls) and Hong Kong (37 boys, 23 girls). From both countries, all sampled were senior students averaging 16 years old, from typical secondary schools in urban, mid-
<table>
<thead>
<tr>
<th>Category</th>
<th>Hong Kong</th>
<th>India</th>
<th>Nepal</th>
<th>Nigeria</th>
<th>Zimbabwe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td></td>
<td>(n = 52)</td>
<td>(n = 63)</td>
<td>(n = 109)</td>
<td>(n = 105)</td>
<td>(n = 37)</td>
</tr>
<tr>
<td>Idiocentric</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>40.50</td>
<td>49.25</td>
<td>50.30</td>
<td>49.25</td>
<td>65.30</td>
</tr>
<tr>
<td>SD</td>
<td>12.84</td>
<td>11.78</td>
<td>9.64</td>
<td>9.31</td>
<td>9.79</td>
</tr>
<tr>
<td>Large group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>41.8</td>
<td>32.40</td>
<td>32.05</td>
<td>16.40*</td>
<td>22.85</td>
</tr>
<tr>
<td>SD</td>
<td>11.42</td>
<td>11.13</td>
<td>9.31</td>
<td>7.45</td>
<td>7.62</td>
</tr>
<tr>
<td>Small group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>9.9</td>
<td>8.75</td>
<td>6.70</td>
<td>13.45*</td>
<td>9.75</td>
</tr>
<tr>
<td>SD</td>
<td>6.06</td>
<td>4.54</td>
<td>5.32</td>
<td>6.31</td>
<td>5.97</td>
</tr>
<tr>
<td>Allocentric</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>7.8</td>
<td>9.60</td>
<td>10.95</td>
<td>20.90*</td>
<td>2.10</td>
</tr>
<tr>
<td>SD</td>
<td>5.14</td>
<td>5.63</td>
<td>5.14</td>
<td>6.42</td>
<td>0.98</td>
</tr>
</tbody>
</table>

*Note. TST = Twenty Statements Test.
*The within-country gender difference is statistically significant at the .01 level.
TABLE 2. Summary $F$ Statistics From Country $\times$ Gender ANOVAs of TST Category Percentages and Effect Sizes

<table>
<thead>
<tr>
<th>Variable</th>
<th>Idiocentric</th>
<th>Large Group</th>
<th>Small Group</th>
<th>Allocentric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>effect</td>
<td>$F$</td>
<td>effect</td>
</tr>
<tr>
<td>Country (4,810 df)</td>
<td>15.80*</td>
<td>.27</td>
<td>19.29*</td>
<td>.29</td>
</tr>
<tr>
<td>Gender (1,810 df)</td>
<td>1.31</td>
<td>.01</td>
<td>32.92*</td>
<td>.20</td>
</tr>
<tr>
<td>Country $\times$ Gender (4,801 df)</td>
<td>18.07*</td>
<td>.29</td>
<td>32.22*</td>
<td>.38</td>
</tr>
</tbody>
</table>

*Note. TST = Twenty Statements Test.

*The $F$ statistic is significant at the .01 level.
dle class areas. We randomly sampled two classes from each school. Both Taiwan and Hong Kong are highly modernized societies that have preserved their strong Chinese cultural traditions and both are relatively collectivist in nature (Bond, 1996). (See the parenthetical list earlier in the present study.)

**Instrument and Procedure**

We used the TST and the response categories that we used in Study 1. Students from both countries were tested in their local Chinese dialect, and native speakers unaware of the hypotheses of the study translated these responses into English. These translators (both bilingual master’s-degree students) classified the responses and then categorized the responses of a random half of respondents from each country, after a trial session where they worked together with D. Watkins on a random selection of responses from 10 participants. Later, D. Watkins randomly chose the responses of 10 males and 10 females from each country for a reliability check. Once again, the percentage of agreement in both cases exceeded 90%.

**Results**

The mean percentage of responses of the boys and girls from each country are shown in Table 3. A summary of the Country × Gender ANOVA’s of these data are shown in Table 4. It can be seen that there was a Country main effect for both the Idiocentric and Large Group categories (effect sizes of .12 and .13, respectively) with post hoc tests indicating that the Taiwanese participants tended to use the former category more often but the latter less frequently than did their Hong Kong peers.

In both samples, we found statistically significant within-country gender differences for the Small Group category that was more often used by the girls in both cases. Not surprisingly, the corresponding gender main effect (an effect size of .21) was significant unlike other main effects or interactions.

**GENERAL DISCUSSION**

Reviews of American research (Cross & Madson, 1997; Josephs et al., 1992) and data from four other individualist countries—Australia, Canada, New Zealand, and (White) South Africa—reported in the current research program (Watkins, Adair, Akande, Gerong, et al., 1998) support the hypothesis that independent (Idiocentric) self-conceptions are more salient for males than for females. However, the findings of the current research program support previous research with the TST that such gender differences are not found for a range of collectivist countries for either secondary school or college students (Watkins, Adair, Akande, Gerong, et al., 1998; Watkins, Yau, Fleming, et al., 1997).
TABLE 3. Means and Standard Deviations of Percentages of TST Response Categories for Hong Kong and Taiwanese Secondary School Students by Gender

<table>
<thead>
<tr>
<th>Category</th>
<th>Hong Kong</th>
<th></th>
<th>Taiwan</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td></td>
<td>(n = 37)</td>
<td>(n = 23)</td>
<td>(n = 49)</td>
<td>(n = 27)</td>
</tr>
<tr>
<td>Idiocentric</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>55.20</td>
<td>48.08</td>
<td>60.12</td>
<td>63.49</td>
</tr>
<tr>
<td>SD</td>
<td>11.43</td>
<td>10.98</td>
<td>11.26</td>
<td>11.31</td>
</tr>
<tr>
<td>Large group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>31.01</td>
<td>26.64</td>
<td>23.81</td>
<td>14.00*</td>
</tr>
<tr>
<td>SD</td>
<td>8.32</td>
<td>7.84</td>
<td>7.65</td>
<td>6.24</td>
</tr>
<tr>
<td>Small group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>5.74</td>
<td>14.96*</td>
<td>7.46</td>
<td>15.77*</td>
</tr>
<tr>
<td>SD</td>
<td>2.04</td>
<td>6.03</td>
<td>3.77</td>
<td>5.79</td>
</tr>
<tr>
<td>Allocentric</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>8.06</td>
<td>10.32</td>
<td>8.60</td>
<td>6.74</td>
</tr>
<tr>
<td>SD</td>
<td>4.14</td>
<td>4.79</td>
<td>4.72</td>
<td>3.89</td>
</tr>
</tbody>
</table>

Note. TST = Twenty Statements Test.
*The within-country gender difference is statistically significant at the .01 level (all effect sizes are over .20).

In neither Study 1 nor Study 2 were any of the seven within-country gender differences in the idiocentric category found to be significant. Not surprisingly, the gender main ANOVA effect was also not found to be significant. Significant Country × Gender interaction effects were found for all four self-categories in Study 1 but for none of the categories in Study 2. Clearly, gender differences were relatively consistent across country in Study 2 but not Study 1. Determining to what extent these findings might be a result of the use of secondary school students rather than college students in Study 2 would need further research.

Within-country gender differences were found to be statistically significant for 5 of the 15 collectivist self-categories in Study 1 and for 3 of the 6 categories in Study 2. As we had predicted, it was the males who more often provided Large-Group responses. This finding supports the claim that females in developing
<table>
<thead>
<tr>
<th>Variable</th>
<th>Idiocentric</th>
<th>Large Group</th>
<th>Small Group</th>
<th>Allocentric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>effect</td>
<td>$F$</td>
<td>effect</td>
</tr>
<tr>
<td>Country (1,132 df)</td>
<td>10.23*</td>
<td>.12</td>
<td>10.32*</td>
<td>.13</td>
</tr>
<tr>
<td>Gender (1,132 df)</td>
<td>0.35</td>
<td>.01</td>
<td>5.27</td>
<td>.07</td>
</tr>
<tr>
<td>Country $\times$ Gender (1,132 df)</td>
<td>2.71</td>
<td>.05</td>
<td>0.78</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. TST = Twenty Statements Test.

$^*p = .01$. 
countries have limited opportunities for participation in social or other groups outside of the extended family (Bourdillon, 1987).

We recognize the limitations of the TST as a research tool and the fuzzy boundaries of some of the categories that we used in the present study. However, it is difficult to avoid the resultant subjectivity in exploring the nature of self-construal. At least in the present study's research, independent judges who were blind to the hypotheses performed the checks. Moreover, our results support the findings of other studies of the current research program using a quantitative research instrument with both college students (Watkins, Adair, Akande, Cheng, et al., 1998) and adults (Watkins, Yau, Fleming, et al., 1997) described earlier. To answer the generalization question posed by Cross and Madson (1997)—the findings of all studies yet in the current research program indicate that gender differences in self-conception cannot be readily generalized to a range of non-Western cultures. Kashima et al. (1995) found that gender differences were in specific categories of the collectivist self, once again emphasizing the need to subdivide the category of self-construal. However, the present study does not support the claim of the study by Kashima et al. that such differences were found primarily in the Allocentric category.

In both Study 1 and Study 2, we found a statistically significant main effect for country in the Idiocentric and Small-Group categories (and both of the other categories for Study 1). So, contrary to predictions, these respondents, all of whom were from cultures that are supposedly collectivist, provided different self-conceptions.

The present study's subhypothesis that the countries closest in geographical and ethnic terms would show the most similar self-conceptions is not supported by planned-comparison statistical tests. Thus, Table 1 shows that each of the pair of India and Nepal and each of the pair of Nigeria and Zimbabwe differed by about 15% from one another in the Idiocentric category in Study 1, as did Taiwan/Hong Kong in Study 2. As Bond (1994) and Leung et al. (1995) have argued, the first requirement of any test for an underlying dimension of individualism-collectivism is to show that supposedly individualist (and collectivist) countries do not differ among themselves.

As indicated earlier, Hofstede's (1980) list of 50 countries and 3 regions (the higher the ranking the higher the collectivism) ranked the countries in the present study as follows: Taiwan was 10th; Hong Kong was 16th, India was 27th, East Africa (including Zimbabwe) was 18th–19th; and West Africa (including Nigeria) was 13th–14th. Although the above ranking of India may be unduly high—like China and Japan, India has often been treated as an exemplar of collectivist culture (cf. Dhawan et al., 1995).

Given the differences found by the present study between collectivist countries (all similar in individualism–collectivism rankings according to Hofstede, 1980; see the parenthetical list earlier in the present study), these findings indicate that Triandis's (1989) and Markus and Kitayama's (1991) claims that this cultural dimension underlies the nature of self-construal need to be treated with
caution. (We doubt the validity of a comparison of TST scores across different studies [to ensure a fair degree of consistency within a particular set of judges is possible, but such consistency is much more difficult across different judges]; but for comparison, in an earlier study [Watkins, Adair, Akande, Gerong, et al., 1998] the percentage of idiocentric responses from university students from four individualist cultures was 65.83% for men and 55.36% for women; and from five collectivist cultures was 70.37% for men and 72.62% for women.) Also, we need to be careful in assuming that countries from the same continent, such as Africa and Asia in the present study, share similar psychological characteristics.

The investigators in the current research program of which the present study is a part have tried to extend previous investigations to a wider range of respondents. Still, future research can test the generalizability of findings in this area. The gender differences in Western countries reported by Cross and Madson (1997) need to be extended beyond Anglophone countries. Samples in all countries need to include working class respondents. In many collectivist cultures, such as the African, Indian, and Nepalese cultures that the present study sampled, the women who achieve relative educational success (such as reaching college) are not typical of women in their culture. This distinction might lead them to more male-like and idiocentric self-conceptions, whereas the predicted gender differences might be found in a wider cross-section of the community. Of course, the Western findings might not generalize to include non-college-educated people either.

In the present study’s research, we have tried to go beyond a simple independent–interdependent self-dichotomy by investigating subcomponents of the interdependent self. Indeed, we found consistent gender differences within these subcomponents. Perhaps a similar subdivision of the independent self would lead to the identification of consistent gender differences (see Kashima et al., 1995, for further discussion). Cross and Madson (1997) presented a fascinating portrayal of the likely consequences of gender differences in self-construal in relation to the independent–interdependent self-dichotomy in terms of salient psychological processes related to the self, such as information processing, motivation, self-enhancement strategies, and emotional response. However, we caution: before further theorizing, investigators need to understand better the nature of gender differences in self-construal. As Cross and Madson themselves pointed out, cross-cultural research is vital to distinguish true gender differences from culturally specific ones.

REFERENCES


*Received March 29, 2000*

*Accepted November 7, 2001*