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## **Individual and Cultural Gender Roles: A Comparison of Anglo-Australians and Chinese in Australia**

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### **ABSTRACT**

*Using a combined student and community sample, the present study examined whether there were cultural differences in gender role stereotypes between Anglo-Australians and Chinese background immigrants and sojourners in Australia. In addition, cultural differences in the sex-based differentiation of gender roles were examined, along with an assessment of the possible mediating role of acculturation. Five-hundred and ninety participants (418 Anglo-Australians, 172 of Chinese background) from academic institutions and community groups in Melbourne, Australia were administered the Bem Sex Role Inventory (BSRI), an individual-level measure of gender roles. Factor analyses of the Bem items showed similar factor structures for the two cultural groups, despite differences on their country-level indices of masculinity (Hofstede, 1998). Further, Hofstede's proposal that sex differences in gender roles would be more pronounced in "masculine" societies was not supported, however both genders identified more strongly with masculine values/traits if they were Anglo-Australian in background, and with feminine values/traits if they were of Chinese origin. The possible role of acculturation in mediating these identifications was not established.*

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### **INTRODUCTION**

It is widely recognized that there are differences in gender roles between males and females, and that much of this difference is due to the socialization process. It follows that in different cultures, where children are socialized into adopting various value and behaviour patterns, there

might be cultural differences in gender roles. These cultural differences in gender roles may develop in at least two different ways. First, the conception of masculine and feminine gender roles might be different for different cultures, such that what is regarded as feminine in one culture may be regarded as masculine in another. Second, the conception of masculinity and femininity might be similar across cultures in general, but in some cultures, one might expect greater differences between the sexes in the uptake of these roles. The following is an examination of the literature on the above two possibilities.

In terms of cultural differences in the conception of masculinity and femininity, Ward and Sethi (1986) and Keyes (1983), in their examinations of Asian gender roles among secondary and tertiary students, found that many of the stereotypical western feminine characteristics (often described as "relational") and stereotypically male ("instrumental") characteristics were either regarded as desirable for both genders or were neutral for Asians. Examining gender role stereotypes among Chinese children, adolescents and tertiary students, Cheung (1996) maintained that in Chinese societies, the gender stereotypes were largely consistent with those found in western studies, with higher cross-cultural agreement for male stereotypes than female stereotypes. Best and Williams (1994) examined gender roles among tertiary students from 25 countries and concluded that there were more cross-cultural similarities than differences, although there were some minor variations which could be due to cultural variations. To sum up, in these studies based on student samples, there seemed to be broad similarities in gender roles across many different cultural groups.

Considering the influence of culture on the extent of gender-role differences, Kashima, Kim, Gelfand, Yamaguchi, Choi and Yuki (1995) examined the nature of cultural and gender differences in self-construals to see whether there were any overlaps between gender and cultural differences. Using a sample of tertiary students from Japan, Korea, Hawaii, mainland United States and Australia, they found that cultural differences were "most pronounced on the individualist dimension" (p.932) whereas gender differences were most clear on the relational dimension of the self. They further found that males and females from the same culture tended to be close together, except for those from Australia and mainland United States, where the same gender groups tended to be more similar to each other than their counterparts from the same culture. Their findings suggest that there might be cultural differences in the extent of gender differences but they did not elaborate on this issue.

Best and Williams (1994) collected data from young men and women from Asian countries (India, Japan, Malaysia, Pakistan, Singapore), European countries (England, Finland, Germany, Italy, the Netherlands), North American countries (Canada, the United States), Nigeria and Venezuela, and found that the self concepts of males and females tended to be more highly differentiated in countries with high "power-distance." By power-distance was meant the extent to which people in the society accept unequal distribution of power. Best and Williams (1994) found that gender roles were more pronounced in countries higher on power-distance, for example, India, Singapore, Pakistan (Hofstede & Bond, 1984; Bond, 1996).

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The work of Hofstede (1998) is relevant here. He argues that a form of the masculinity/femininity dimension differentiates countries, as well as individuals. He postulates that while an individual can have both masculine and feminine traits, a country's culture is either masculine or feminine. "Masculinity stands for a society in which men are supposed to be assertive, tough and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life. The opposite pole, femininity stands for a society in which both men and women are supposed to be modest, tender, and concerned with the quality of life (p. 6-7). " In masculine countries, decisiveness, liveliness and ambitiousness are more often seen as masculine, whereas caring and gentleness are more often regarded as feminine. In feminine cultures, all these terms are seen as applying to both men and women. In masculine cultures, assertiveness is emphasised whereas in feminine cultures, modesty is emphasised. Femininity pertains to societies in which social gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life. Masculinity pertains to societies in which social gender roles are clearly distinct: men are supposed to be assertive and tough and women are supposed to be modest and tender (Hofstede & Vunderink, 1994). Men's values differ more from women's values in masculine cultures than in feminine cultures, and more for younger than for older persons. The gender gap in values (tender versus tough) is larger in masculine than in feminine cultures.

Hofstede developed a "masculinity index" for many of the world's countries, based on his analysis of work goals of employees of a large multinational company in 40 different countries (Hofstede, 1980). Examples of high scoring countries are Austria and Japan and of low scoring countries are Norway and Sweden. The results of studies examining the relationship between a country's masculinity index and the extent of gender difference, are, however, inconsistent. Hofstede and Vunderink (1994) found that, contrary to their predictions, there were greater gender differences in masculine values such as advancement and earnings among Dutch tertiary students than a group of American tertiary students studying in Netherlands, even though the United States scored much higher than the Netherlands on the masculinity index. Again contrary to expectations, Best and Williams (1994) found that gender differences in self concepts on masculinity/femininity among young men and women were less differentiated in high masculinity index countries, but self concepts of males and females tended to be more differentiated in high power distance countries.

There were several major limitations to the above studies. The samples used were mainly student samples and it is not clear whether the findings would relate to older groups more established in their society. Many of the major cross-cultural studies did not include a Chinese group. Furthermore, except for Hofstede and Vunderink (1994), all studies compared students/young people residing and studying in their own countries of origin, so that the interesting issue of the influence of acculturation could not be established. In the present study we aimed to examine cultural divergence in gender-role differences, using a group of Chinese students and adults residing in Australia, and comparing them with Anglo-Australians. Australia is regarded as among the top third masculine countries in Hofstede's study, with a Masculinity index of 61 (Hofstede & Vunderink, 1994) whereas Asian countries are found to have lower Masculinity indices. The Masculinity indices cited for various Asian countries were: Hong Kong (57), Malaysia (50), Singapore (48), Indonesia (46), Taiwan (45), Thailand (34) (Hofstede, 1998).

Using a combined student and community sample, we examined three research questions. First, were there cultural differences in gender role stereotypes between Anglo-Australians and Chinese migrants and sojourners in Australia? Second, were there cultural differences in the extent of gender differences between Anglo-Australians and Chinese migrants and sojourners in Australia? Third, were gender role stereotypes associated with indices of acculturation such as length of time in the receiving society? To address these questions, we used the Bem Sex Role Inventory (BSRI), an individual level measure of gender role stereotypes, and performed factor analyses for the two cultural groups (which differed on their country-level masculinity indices) separately to examine similarities and differences in factor structures. New factor scores based on factor analyses results were calculated and the means scores on these new measures compared across culture and gender groups.

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## METHOD

### Participants

There were 590 participants from academic institutions and community groups in Melbourne, Australia. Of these, 418 were Anglo-Australians (149 males, 269 females), the majority of whom ( $n = 383$ , 92%) were born in Australia. (The rest were born in United States, New Zealand, or the United Kingdom). These participants and their parents were born in English-speaking countries and English was the only language spoken at home. There were 172 Chinese participants (88 males, 84 females) (including 69 Chinese overseas students), and they were born in Hong Kong ( $n = 82$ ), Malaysia ( $n = 29$ ), China ( $n = 13$ ), Indonesia ( $n = 9$ ), Australia ( $n = 9$ ), Taiwan ( $n = 8$ ), Vietnam ( $n = 8$ ), Singapore ( $n = 7$ ), and others ( $n = 7$ ). They either spoke Chinese at home or identified themselves as Chinese. The mean age of the participants was 26.34 years ( $sd = 10.06$ ) and the age range of the participants was from 15 years to 60 years. There were 277 participants (208 Anglo-Australians and 69 Chinese) who were 21 years old or younger, 210 participants (130 Anglo-Australians and 80 Chinese) who were between the ages of 22 and 35, and 103 participants (80 Anglo-Australians and 23 Chinese) who were between the ages of 36 and 60. The mean age of the Anglo-Australians was 26.70 ( $sd = 10.54$ ) and that for the Chinese was 25.49 ( $sd = 8.74$ ) and there was no significant difference between mean ages for the two groups. The mean length of residence in Australia was 25.46 years ( $sd = 10.76$ ) for the Anglo-Australians and 6.53 years ( $sd = 5.50$ ) for the Chinese participants.

### Materials

We used a questionnaire comprising the Bem Sex Role Inventory (BSRI) (Bem, 1974) and demographic information on sex, age and country of origin, language spoken at home and ethnic identification. The BSRI inventory consists of 60 self-descriptive, personality-characteristic adjectives designed to measure psychological masculinity and femininity as two independent variables. All adjectives are designed to be positively toned, or socially desirable. Twenty items assess masculinity, 20 assess femininity; the other 20 are neutral. Each adjective is ranked on a

Likert scale where 1 = never or almost never true and 7 = always or almost always true. Scores are summed to form two sub-scales measuring masculinity and femininity.

## Procedure

The participants were recruited through university groups and ethnic and religious-based community groups. Students recruited the Anglo-Australian adult group as part of a course assignment. The university-based sample comprised 337 individuals (sample frame 1, mean age 21.6 years; 233 Anglo-Australian students, 104 Chinese-background students) and there were 253 individuals recruited from the community (sample frame 2, mean age 32.6 years; 185 Anglo-Australians, 68 Chinese background). The community group was significantly older than the university group,  $F(1,586) = 178.4, p < 0.001$ , but there were no significant age differences between the cultural groups, nor was there a significant cultural group by sampling frame interaction on age. Participants either completed the questionnaires in small groups in university or community groups or at their own homes and then the questionnaires were returned to the researchers via mail-back envelopes.

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## RESULTS

### Factor Analysis of BSRI Items

We subjected the 60 items of the BSRI to a principal components factor analysis with varimax rotation, separately for the two cultural groups, to enable comparison of factor structures. Inspection of Scree plots and factor loadings suggested that for both the Anglo and Chinese groups, a three-factor solution provided the most parsimonious and meaningful solution. These solutions accounted for 33.0% and 31.5% of the variances for the Anglo and Chinese groups respectively. Table 1 shows the factor structures for the two groups. The table includes Bem's original categorization of each item. The largest loading for each item on each factor is shown, separately for the cultural groups. When a loading is asterisked, this indicates that for the particular cultural group, the item loads more highly on another factor.

**Table 1: Factor Structure of Bem Sex Role Inventory Items for Anglo and Chinese Cultural Groups**

	Original Bem category	Chinese loading N=206	Anglo loading N=418
Relationship Orientation/Femininity			
Percent variance		18.21	13.78
33. Sincere	Neutral	.705	.631
3. Helpful	Neutral	.677	.644

41. Warm	Feminine	.670	.609
29. Understanding	Feminine	.631	.745
32. Compassionate	Feminine	.619	.735
45. Friendly	Neutral	.615	.478
11. Affectionate	Feminine	.593	.542
26. Sensitive to needs of others	Feminine	.586	.749
5. Cheerful	Feminine	.576	.325*
23. Sympathetic	Feminine	.556	.760
21. Reliable	Neutral	.554	.509
44. Tender	Feminine	.527	.586
39. Likeable	Neutral	.513	.333*
35. Eager to soothe hurt feelings	Feminine	.502	.657
17. Loyal	Feminine	.501	.476
59. Gentle	Feminine	.479	.714
27. Truthful	Neutral	.462	.470
15. Happy	Neutral	.420	.295*
9. Conscientious	Neutral	.406	.363
57. Tactful	Neutral	.390*	.475
20. Feminine	Feminine	.377	.409
34. Self-sufficient	Masculine	.373	.277*
56. Loves children	Feminine	.340	.486
4. Defends own beliefs	Masculine	.322*	.145*
38. Soft spoken	Feminine	.255	.278*
60. Conventional	Neutral	.190	.321
2. Yielding	Feminine	.167*	.341
40. Masculine	Masculine	-.046*	-.390
53. Does not use harsh language	Feminine	-.203*	.250

#### Instrumentalism/Masculinity

Percent variance		7.11	13.50
37. Dominant	Masculine	.664	.656
58. Ambitious	Masculine	.658	.536
43. Willing to take a stand	Masculine	.600	.721
49. Acts as leader	Masculine	.590	.717
16. Strong personality	Masculine	.578	.761
52. Individualistic	Masculine	.572	.521
55. Competitive	Masculine	.563	.492
25. Has leadership abilities	Masculine	.562	.710
46. Aggressive	Masculine	.522	.378*
19. Forceful	Masculine	.520	.542

28. Willing to take risks	Masculine	.497	.492
7. Independent	Masculine	.489	.490
51. Adaptable	Neutral	.482	.434
42. Solemn	Neutral	.454	0*
57. Tactful	Neutral	.448	0*
22. Analytical	Masculine	.445	.322
13. Assertive	Masculine	.427	.742
40. Masculine	Masculine	.426	.290*
10 Athletic	Masculine	.401	.271
31. Makes decisions easily	Masculine	.356	.551
30. Secretive	Neutral	.347	.107*
4. Defends own beliefs	Masculine	.341	.536
34. Self-sufficient	Masculine	.337*	.552
18 Unpredictable	Neutral	.331*	.217*
36. Conceited	Neutral	.326	.144*
1. Self reliant	Masculine	.177*	.520
39. Likeable	Neutral	.170*	.397
38. Soft-spoken	Feminine	.099*	-.385
5. Cheerful	Feminine	.084*	.419
14. Flatterable	Feminine	.078*	.244
15. Happy	Neutral	-.050*	.438
12. Theatrical	Neutral	-.182*	.329

#### Emotional lability

Percent variance		6.22	5.69
50. Childlike	Feminine	.664	.434
6. Moody	Neutral	.532	.541
48. Inefficient	Neutral	.521	.386
54. Unsystematic	Neutral	.502	.307
47. Gullible	Feminine	.489	.400
24. Jealous	Neutral	.485	.593
18. Unpredictable	Neutral	.365	.426
12. Theatrical	Neutral	.324	.197*
2. Yielding	Feminine	.324	.194*
30. Secretive	Neutral	.261*	.507
8. Shy	Feminine	.245	.381*
46. Aggressive	Masculine	.241*	.430
36. Conceited	Neutral	.069*	.522
42. Solemn	Neutral	-.032*	.430
1. Self- reliant	Masculine	-.329	0*

Note: \* have a higher loading on another factor

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The three factors that emerged for both cultural groups, were largely overlapping, with some interesting differences. The first factor in both cases was similar to Bem's femininity factor, in that it contained many of the stereotypically feminine adjectives in Bem's measure. However, the factor appeared to have more positive overtones than Bem's original femininity scale, omitting as it does items like childlike, gullible and yielding, which, although Bem assessed them as socially desirable, do appear to have connotations of immaturity, at least in the sense of innocence. We labelled this factor relationship orientation/femininity, because it loaded highly on items reflecting qualities important in close relationships, such as sincerity, understanding and compassion.

With respect to group differences on this relationship orientation/femininity factor, the Chinese group showed higher loadings on likeable, cheerful and happy than did the Anglo group, who appeared less likely to associate relationship orientation with positive mood. In addition, the Chinese group was less likely than the Anglo group to see this factor as the antithesis of masculinity.

Items which, for both ethnic groups, had loadings that were (a) highest for this factor, and (b) greater than 0.3 were: Sincere (neutral: N), Understanding (feminine: F), Compassionate (F), Helpful (N), Sensitive to needs of others (F), Friendly (N), Warm (F), Affectionate (F), Sympathetic (F), Tender (F), Reliable (N), Gentle (F), Eager to soothe hurt feelings (F), Loyal (F), Truthful (N), Conscientious (N), Feminine (F), Loves children (F). There were 18 such items. Six of these items were originally neutral in the Bem scale; 12 were feminine. In order to produce a scale that would have similar meaning across the two cultural groups, we summed ratings on these items to form a new relationship orientation/ femininity scale. The Cronbach alpha reliability of this scale for the Anglo group was 0.89 and for the Chinese group was 0.87.

The second factor we labelled instrumentalism /masculinity, because of the strong loadings for both groups on items reflecting potency and striving. This factor was similar to Bem's masculinity factor with many overlapping items. Interestingly, the Chinese group saw being tactful and solemn as part of this factor while Anglos did not, and Anglos, in contrast with the Chinese, associated this factor with happiness, cheerfulness, and self sufficiency.

Items which, for both cultural groups, had loadings that were (a) highest for this factor, and (b) greater than 0.3 were: Dominant (masculine: M), Acts as leader (M), Willing to take a stand (M), Ambitious (M), Strong personality (M), Has leadership abilities (M), Forceful (M), Competitive (M), Individualistic (M), Analytical (M), Willing to take risks (M), Independent (M), Adaptable (N), Makes decisions easily (M), Assertive (M), Defends own beliefs (M). There were 16 such items - 15 of the original Bem masculine items and one neutral item. In order to produce a scale that would have similar meaning across the two cultural groups, we summed ratings on these items to form a new instrumentalism /masculinity scale. The Cronbach alpha reliability of this scale was 0.87 for both the Anglo and the Chinese group.



The third, smallest factor we labelled emotional lability. This factor comprised emotional aspects of personality such as moodiness, jealousy and inefficiency. Secretiveness, solemnity and conceit were seen as part of this trait for the Anglo group but less so for the Chinese group. The Chinese participants, on the other hand, linked theatricality and lack of self-reliance with the other traits to a greater extent than Anglos. The loadings on this factor suggest it could be called "emotional lability."

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Items, which, for both cultural groups, had loadings that were (a) highest for this factor, and (b) greater than 0.3 were: Childlike (F), Moody (N), Unsystematic (N), Jealous (N), Inefficient (N), Gullible (F), and Unpredictable (N). Ratings on these seven items (five "neutral" and two "feminine") were summed to form a new emotional lability scale, which was expected to have similar meaning across both cultural groups. The Cronbach alphas for this scale were lower than for the two previous scales (0.50 for the Anglos group and 0.59 for the Chinese group), so results for this subscale need to be viewed with caution.

Correlations between the three variables were in expected directions. Relationship orientation/femininity had a low to moderate statistically significant correlation with instrumentalism/masculinity ( $r = 0.34$ ;  $p < 0.001$ ). Emotional lability had very low but statistically significant negative correlations with relationship orientation/ femininity ( $r = -0.16$ ;  $p < 0.001$ ) but no association with instrumentalism/ masculinity. Relationship orientation/femininity was highly positively correlated with the original Bem femininity score ( $r = 0.89$ ,  $p < 0.001$ ) and instrumentalism/masculinity was highly positively correlated with the original Bem masculinity score ( $r = 0.98$ ,  $p < 0.001$ ). These correlational patterns did not differ appreciably across the cultural groups.

### Gender and Cultural Differences

To examine culture and gender differences in the new sex role scales (relationship orientation/femininity and instrumentalism/masculinity), and in the emotional lability scale, we ran a multivariate analysis of covariance. The independent variables were cultural group (Anglo-Australians; Chinese), gender, and sample frame (university, community), with age as the covariate. The dependent variables were relationship orientation/ femininity, instrumentalism/ masculinity, and emotional lability scores. Age was a significant covariate (Table 2). Univariate tests (Table 3) showed that age was a significant covariate for relationship orientation, with older participants scoring higher on this variable ( $r = 0.14$ ;  $p = 0.001$ ), and on emotional lability, with younger people scoring higher on this variable ( $r = -0.26$ ;  $p < 0.001$ ). There were significant cultural group, gender and sampling frame main effects, and the culture by gender and culture by sampling frame interactions were also significant. Table 2 gives details of the results of the multivariate tests.

### Table 2: Multivariate Results of Three-Way MANCOVA

Effect	F (3,579)
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Intercept	1543.27***
Age (covariate)	12.80***
Culture	22.32***
Gender	27.09***
Sampling frame	3.50**
Culture X Gender	3.80**
CultureX Frame	8.58***
Gender X Frame	2.07
Culture X Gender X Frame	0.38

\*\*p<0.01; \*\*\*p< 0.001

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Univariate tests for the multivariate main factors are shown in Table 3. These indicate that the two cultural groups differed in relationship orientation/ femininity and instrumentalism/ masculinity, with the Anglo group reporting higher scores on both these measures. The cultural groups did not differ on emotional lability. Significant gender differences were established, with univariate F tests indicating that females reported higher relationship orientation/ femininity scores than males, while males reported higher instrumentalism/ masculinity scores than females. There were no gender differences on emotional lability. The effects of sampling frame were significant over and above the effects of age (important because the community sample was older), with univariate anovas indicating that sampling frame was only significantly associated with emotional lability, not the gender role variables. Participants drawn from the university sample were more emotionally labile than those drawn from the community sample.

**Table 3: Means, Standard Deviations, Sums of Squares and Univariate F-Values for Gender, Cultural Groups, and Smpling Frames on Relationship Orientation/Femininity, Instrumentalism/Masculinity, and Emotional Lability**

	Relationship orientation/ femininity	Instrumentalism/ masculinity	Emotional lability
Gender	Mean (std dev)	Mean (std dev)	Mean (std dev)
Males	88.70 (13.19)	75.27(13.55)	23.61 (5.99)
Females	97.42 (12.89)	72.20 (14.11)	23.12 (5.57)
Sum of squares	4515.653	4079.169	11.816
Univariate F (1,581)	29.01***	23.55***	0.40
Culture			

Anglo-Australians	96.27 (13.28)	75.85 (13.42)	22.93 (5.48)
Chinese	88.21 (12.99)	67.55 (13.53)	24.26 (6.25)
Sum of squares	4369.212	10242.145	46.733
Univariate F (1,581)	28.07***	59.14***	1.58
Sampling frame			
University sample	93.42 (13.61)	72.95 (13.55)	24.29 (5.39)
Community sample	94.58 (13.78)	74.07 (14.48)	22.01 (5.95)
Sum of squares	24.811	42.595	284.453
Univariate F (1,581)	0.16	0.25	9.60**
Age (covariate)			
Sum of squares	1433.307	375.966	723.082
Univariate F (1,581)	9.21**	2.17	24.39***

Note: \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

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As mentioned previously, there were two significant multivariate interactions. Main effects of gender, cultural group and sampling frame need to be interpreted in the light of these interactions. First, there was a cultural group by gender interaction, which univariate tests indicated was significant for relationship orientation/ femininity and instrumentalism/ masculinity. For relationship orientation/ femininity, only Anglo males and females showed significant sex differences,  $F(1, 415) = 65.41, p < 0.001$ , while for Chinese the sex differences were in the same direction but much smaller and not significant. With respect to instrumentalism/ masculinity, Anglo males and females scored higher than Chinese males and females. Sex differences on instrumentalism were only statistically significant for the Chinese group however,  $F(1, 170) = 17.13, p < 0.001$ , with Anglo males and females showing a much smaller, non-significant difference on this variable. Table 4 illustrates these patterns.

**Table 4: Interaction between Cultural Group and Gender on Relationship Orientation/Femininity and Instrumentalism/Masculinity Scores: Means and Univariate F-Values**

Gender	Relationship orientation	Instrumentalism
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	Anglo- Australians	Chinese	Anglo- Australians	Chinese
Males	89.70	87.01	77.47	71.53
Females	99.91	89.46	74.96	63.37
Univariate F	8.33**		7.14**	

Note: \*\*  $p < 0.01$

To further explore gender and cultural differences, we conducted a series of independent t tests. Among males only, there was no significant difference between Anglo-Australians and Chinese in relationship orientation/ femininity but there was a significant difference between the two groups in instrumentalism/ masculinity, with Anglo-Australian males reporting higher scores,  $t(235) = 3.33, p = .001$ . Among females only, Anglo-Australians and Chinese differed significantly in both relationship orientation/femininity,  $t(351) = 6.90, p < .001$ , and instrumentalism/ masculinity,  $t(351) = 7.00, p < .001$ , with Anglo-Australian females reporting higher scores in both cases.

The second significant interaction was between cultural group and sampling frame, with the significant univariate effect being for emotional lability only,  $F(1,581) = 18.05, p < 0.001$ . Emotional lability differences between university and community samples for the Anglo and Chinese groups are shown in Table 5. The effects were stronger for the Chinese group, with t-tests indicating significant differences between sampling frame only occurring for this group (Table 5). No other interactions were significant.

**Table 5: Interaction between Cultural Group and Sampling Frame on Emotional Lability**

	Anglo- Australians	Chinese
University sample	23.39	26.30
Community sample	22.36	21.13
t	1.94 (ns)	5.65

Note: \*\*  $p < 0.01$

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### Acculturation Issues

For Chinese participants who were not born in Australia ( $n = 162$ ) it was possible to ascertain the relationship between years in Australia (a rough measure of acculturation) and the dependent variables of this study. The variable "Years in Australia" was not significantly correlated with any of the dependent variables, either for the whole group or for males and females separately.

When age was partialled out of these correlations (due to its possible confounding effect), there was a low but significant positive association between relationship orientation/femininity and years in Australia ( $r = 0.17$ ,  $p < 0.05$ ) for the total group but no significant correlations when the sexes were separated. In addition, we compared Chinese immigrants with sojourners (overseas students in this case), as it is possible that immigrants might acculturate more readily than sojourners. There were no significant differences between the two groups on the gender-role variables. However, sojourners scored significantly higher on the emotional lability factor than immigrants, even controlling for age (Chinese immigrants: mean emotional lability = 22.50; Sojourners: mean = 26.88;  $F(1, 170) = 22.96$ ;  $p < 0.001$ ). This effect was similar for males and females.

## DISCUSSION

With regard to the first research question on cultural differences in gender stereotypes, there were some subtle differences between the two ethnic groups in terms of the factor structures of the 60 adjectives, but the structures showed more similarities than differences. Among Anglo-Australians and Chinese-Australians, there were two dimensions, instrumentalism/masculinity and relationship orientation /femininity. The results are consistent with the conclusions of Best and Williams (1994), in the sense that they show in that there are more cross-cultural similarities than differences in gender role concepts.

To this extent we were able to develop scales which were meaningful and stable for both ethnic groups, and which measured concepts similar to, but with some differences from the masculinity and femininity traits defined by Bem. In addition, we isolated an emotional lability factor, from which a common scale could be formed for both cultural groups.

For the second research question on the extent of gender differences between Chinese migrants and sojourners in Australia and Anglo-Australians, the culture by sex interaction offered interesting patterns. Among the Chinese-background group, there was no significant gender difference in relationship orientation/femininity but there was a significant gender difference for Anglo-Australians. The situation was exactly the opposite for instrumentalism/ masculinity. It seems that Chinese-background males and females identified with relationship orientation/feminine traits to the same extent whereas Chinese-background females identified less with instrumentalism/masculine traits than males. Anglo-Australian males and females, on the other hand, identified with instrumentalism/masculine traits to the same extent but females endorsed relationship orientation/feminine traits more.

The pattern of differences can be interpreted in several ways. One possible explanation is that the Anglo-Australian group perceives itself as having more of both the relationship orientation/femininity and instrumentalism/ masculinity characteristics, as the Anglo-Australians reported higher scores on both measures. However, there is the possibility of a social desirability issue. The Chinese participants could have consistently avoided presenting themselves in "too positive" a light (as befits those in a more "modest" feminine society, according to Hofstede, 1998).

Another explanation is somewhat supportive of the Hofstede (1998) notion that sex differences in gender roles will be more pronounced in masculine societies. Among Anglo-Australians (acculturated in a masculine society), there was a set of instrumentalism/ masculinity values that both males and females could identify with and the gender difference in values was within the relationship orientation/femininity dimension. For the Chinese group, the set of values that both males and females could identify with was related to relationship orientation/femininity and gender difference was found in values related to instrumentalism/masculinity. The results indicate different areas of gender differentiation in each cultural group. The Chinese pattern is, to some extent, consistent with Hofstede and Vunderink's (1994) description of feminine culture where men and women are expected to be modest, tender and concerned with quality of life. The Anglo pattern is consistent with a masculinized culture in which both males and females are socialised to be assertive, ambitious and competitive. But neither cultural pattern is entirely consistent with the notion that there will be more pronounced gender role differences (across both dimensions) in a masculine culture.

For the third research question on acculturation, there was only a very weak correlation between length of residence in Australia and relationship orientation/ femininity, and no relationship for instrumentalism/masculinity. The relationship with femininity was in fact counter to the Hofstede (1998) based predictions, given that Australia has been described as a relatively masculine society in comparison with Chinese society. Comparison of immigrants and sojourners did not indicate gender-role differences. It may be premature however to argue that acculturation does not influence gender roles, as the indicators of acculturation used in this study were only approximate.

There were several limitations to the study. First, the sample was essentially a convenience sample as the participants were recruited through community groups and social contacts of the researchers. In addition, sampling frame (university students versus community sample) was not independent of outcomes, although it was only associated with emotional lability, not the major dependent variables of interest – the gender role measures. The Chinese university students were particularly high on emotional lability, with this effect over and above the effects of their age on this measure. Further analysis (see Acculturation section of Results) showed that it was actually the students from Chinese backgrounds visiting Australia for their studies (not the Chinese-Australian students) who were contributing to this raised mean emotional lability score – not a surprising finding given the extra stresses this group faces. Zheng and Berry (1991), for example, reported that Chinese visiting scholars and students in Canada reported more homesickness, loneliness and communication problems than Chinese-Canadian migrant students. In our study, the finding with respect to emotional lability was an interesting one, but it does not alter interpretation of the gender role findings, given that there were only very small negative correlations between emotional lability and the gender role measures. Indeed the gender role findings were consistent across the two sampling frames, which provides some strengthening of the findings.

A further sampling issue was that Chinese background participants were sampled from many different countries. Small sample sizes did not enable systematic analyses of differences arising

from different country backgrounds. We assumed a common thread of Chinese heritage among our Chinese background participants. This was because in this study, the Chinese participants either identified themselves as Chinese or they reported that they used Chinese language at home. Yinger (1986) conceptualizes ethnicity as involving elements including language, religion, race and ancestral homeland with its related culture; subjective identification with the group and participation in shared activities related to the common origin and culture. In our case, our Chinese sample either identified themselves as Chinese (subjective identification) or reported the use of the Chinese language at home. Some post hoc analysis suggests that heritage may be a more important predictor of gender role characteristics than homeland. In our study, comparisons of gender role variables between the Anglo-Australians and the Chinese participants broken down into three (reasonably sized) groups (Hong Kong, Malaysian, Other Chinese) showed some country differences, but essentially reflected the analyses from Tables 2 and 3. In short, Anglo-Australians scored significantly higher than the Chinese background participants on both relationship orientation and instrumentalism, regardless of Chinese homeland. This post hoc analysis is shown in Appendix C.

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Two further limitations of the study relate to measurement issues. The relatively low reliability of the emotional lability scale (below 0.7), suggests that results relating to this scale should be viewed with caution. Acculturation was only measured in terms of years of residence in Australia – a more extensive study could have included other measures such as acculturation attitudes and degree of ethnic identification.

In conclusion, we were able to demonstrate in this study, strong support for cross-cultural similarities in gender-role stereotypes. Further, Hofstede's (1998) proposal that sex differences in gender roles would be more pronounced in masculine societies was not supported. It was only true for feminine-type traits. Anglo-Australian males and females were more differentiated than Chinese background participants on feminine values/traits but Chinese background males and females were more differentiated (and scored lower than Anglo-Australians) with respect to masculine values/traits. The possible role of acculturation in mediating these identifications was not established.

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## APPENDIX

### A. Questionnaire items

1. Your sex (circle one):



Male

Female

2. What is your age ?

3. What is your country of birth

4. How long have you been living in Australia?

5. What is your father's country of birth?

6. What is your mother's country of birth?

7. What language do you usually speak at home?

(if not English, about what percent of the time do you speak English at home?)

8. What language do your parents usually speak at home?

9. Which of the following best describes you? (circle one)

Australian

Chinese

Chinese-Australian

Other ethnic group or category (specify)

Bem Sex Role Inventory items followed these demographic items.

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## B. Correlation Table for Major Variables in Study

	Sex 1=Male 2=Female	Relationship orientation	Instrum' ism	Emotional lability	Age
Group: 1=Anglo	-.14**	-.26**	-.26**	.13**	-.04
2=Chinese					
Sex		.31**	-.11**	-.05	.04

Relationship orientation	.34**	-.15**	.14**
Instrumentalism		-.10*	-.03
Emotional lability			-.26**

Note: \*\* p < 0.01, \* p < .05

### C. Post Hoc Analysis of Gender Role Variables by Country of Origin

Country group	Relationship orientation	Instrumentalism	N
Anglo-Australian	96.23*	75.80*	417
Hong Kong	87.02	64.54**	82
Malaysian	90.93	69.63	29
Other Chinese	87.45	69.62	51
F(3,575)	16.43***	18.32***	579

Notes: \* significantly different from Hong Kong, Malaysian and Other Chinese

\*\* significantly different from Malaysian and Other Chinese

\*\*\* p < 0.001.

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