

# A Research Note: Gender Traits in Singapore

*Weining C. Chang*

## Introduction

Several studies on gender and gender traits were conducted in Singapore. This research note attempts to document a recurrent theme in the findings.

Masculinity and femininity measures are developed by subjects rating personality traits that are considered more desirable for one sex over the other (Bem, 1974; Spence and Helmreich 1978; and Hui and Wong, 1992). The instruments currently used by researchers, though different in some specific items, are pretty similar in the core content, that is, femininity denotes social sensitivity/expressive/communion traits while masculinity denotes task orientation/instrumental/agency traits.

This masculinity and femininity dichotomy seems to be a cross-cultural applicable concept (Williams and Best, 1992). Researchers of the Chinese (Hui and Wong, 1992) found femininity/masculinity to be meaningful constructs in the Chinese culture.

In the current sex/gender literature, based mostly on empirical data collected from Western countries, it is generally reported that scores on the two trait clusters are essentially orthogonal (e.g. Bem, 1974; Spence et al., 1975; 1977). Males in general were reported to have more masculine traits than females, and females were found to rate themselves higher on feminine traits than males. These basic findings have been reported with groups of males and females ranging from kindergarten children to mature adults (e.g. Bem, 1974; O'Connor, Mann and Bardwick, 1978; Hall and Hallberstadt, 1980; Feldman, Biringen and Nash, 1981) and sampled from a broad spectrum of ethnic and socio-economic backgrounds (Spence and Helmreich, 1978; Romer and Cherry, 1980).

Several cross-national studies (e.g. Block, 1973; Spence and Helmreich, 1978; Almeida, 1980; Runge, Frey, Gollwitzer, Helmreich and Spence, 1981) have reported similar results.

Furthermore, in most of these studies, members of each sex fell in the sex-typed categories, ie. feminine or masculine types, and least frequently in the cross-sex category, ie. androgynous or undifferentiated types.

However, a few studies with Asians found that the differentiation between masculinity and femininity personality traits is not as clear as it is in the Western data (Maznah and Choo, 1986; Ward and Sethi, 1986). The subjects involved in these studies were Chinese, Malays and Indians. They came from cultures where the communal/expressive social sensitivity is highly emphasized. Maznah and Choo (1986) reported that when using Bem's (1974) Sex Role Inventory in Malaysian students (54% Malays and 40% Chinese), the masculinity and femininity scales correlated positively with each other ( $r=0.39$ , pp.34). This correlation was much higher than those reported by Bem (1981), ranging between 0.00 to 0.11.

A recent study by Hofstede (1994) suggests that countries that can be classified as feminine in cultural values (Hofstede, 1980) seem to show a higher flexibility for sex-role expectations. Hofstede's cultural femininity is defined in terms of higher emphasis on social communal values. In Hofstede's 1980 data, Singapore fell slightly below the median and was thus classified as a "feminine" country.

Our own studies on the cultural values of Singapore (Chang and Wong, 1995) found that both industry and social harmony were highly endorsed by Singaporean subjects as the more important values. Values pertaining to industry contain concepts that are more instrumental and agentic in nature; while values of social harmony contain concepts that are more expressive and communal in nature (Chang, and Wong, 1995). Thus, characteristics that are classified as masculine and feminine are both highly valued and desired by Singaporean males and females. This is in sharp contrast to Western findings where mascu-

line characteristics were found to be of greater desirability than feminine characteristics (e.g. Taylor and Hall, 1982). Within the cultural context of Singapore, with its dual emphasis on both industry and harmony, are instrumentality and expressiveness still considered highly sex-typed personality traits?

Recently, a series of studies involving gender traits were conducted in Singapore. A recurrent theme was noticed in the findings across two studies which might shed light on the concept of gender traits as a self-report personality variable. In the following, I will briefly summarize the empirical studies and point out this recurrent theme. A discussion focused on culture, gender traits and sex role behaviour will also be presented in an attempt to explain this recurrent phenomenon.

## **The Empirical Studies**

### **Study I- Gender Traits and Leadership Behaviour**

In the first study, Spence & Helmreich's Personal Attributes Questionnaire (PAQ) (1978) was used to measure masculinity and femininity of incumbent male ( $n=42$ ) and female ( $n=40$ ) managers (average age=30+; average education=13 years formal schooling). The PAQ was read and evaluated by a small group of Singaporean male and female students to judge the appropriateness of the traits for male and for females in Singapore. Cronbach alpha values were calculated for the M and the F scale. Alpha of M scale was 0.82; alpha of F scale was 0.80. Both values were well within the acceptable range. Correlation coefficient between M and F scales was 0.20 ( $p=.06$ ). What was interesting was the even distribution of gender traits across male and female managers. Male and female subjects showed almost equal self-ratings of femininity and masculinity.

The equal distribution of feminine and masculine traits was also reflected in their self-perceived management styles: an equal distribution of task- and social-orientedness. Post-hoc analyses however, revealed no significant

differences between any two groups (Chang and Tam, 1994) (see Tables 1a, b, c, d and Figure 1).

**Table 1.**  
**Gender Type and Management Style Scores Across Sexes**

a. Means and Standard Deviations of Masculinity/Femininity Scores for Males and Females.

	Males(n=44)		Females(n=42)		Fratio(df=1.84)	Prob.
	Mean	S.d.	Mean	S.d.		
Masculinity	30.02	4.39	29.29	3.24	0.7784	0.3801
Femininity	29.00	2.96	29.29	3.43	0.1716	0.6797

b. Means and Standard Deviations of Management Style Scores For Males and Females.

	Males(n=44)		Females(n=42)		Fratio(df=1.84)	Prob.
	Mean	S.d.	Mean	S.d.		
Initiation	54.50	7.19	56.33	5.11	1.8416	0.1784
Consideration	56.48	7.10	57.05	5.37	0.1753	0.6765

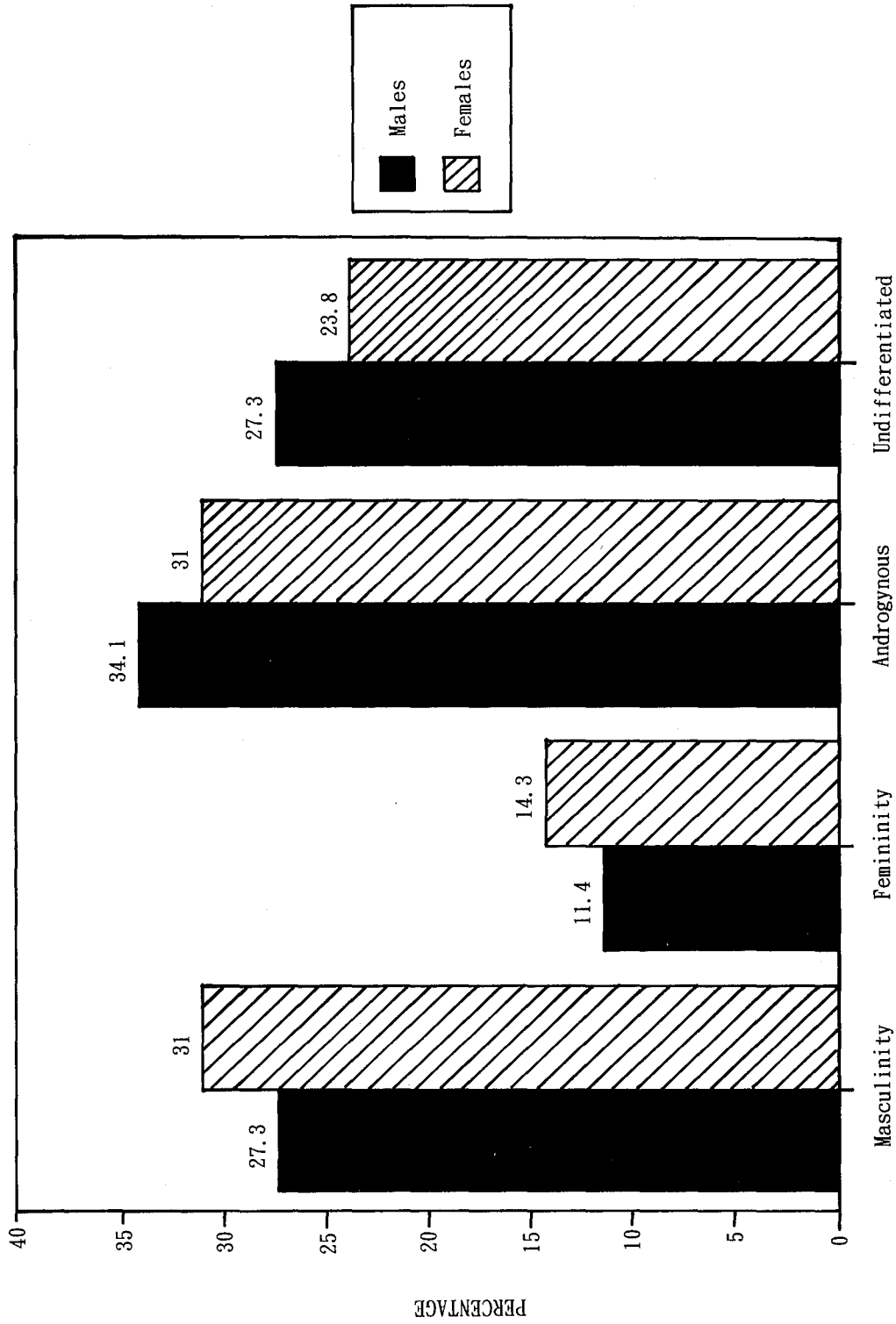
c. Percentage of Males and Females in Each Gender Type.

	Masculine	Feminine	Androgynous	Undifferentiated
Males	27.3%	11.4%	34.1%	27.3%
Females	31.0%	14.3%	31.0%	23.8%

d. Chi-squares For Gender Type Frequencies Between Males and Females.

Gender Type	Observed Freq.	X2	Df	Prob.
Masculine	males=12 females=13	0.04	1	0.8415
Feminine	males=5 females=6	0.0909	1	0.7630
Androgynous	males=15 females=13	0.1429	1	0.7055
Undifferentiated	males=12 females=10	0.1818	1	0.6698

Figure 1. Percentage of Male and Female Managers by Gender Type.



A separate set of analyses was performed with multiple regression on gender traits as predictors and management styles as dependent variables. It was found that for the pooled male and female sample, both femininity and masculinity predicted consideration, a person-oriented style of management ( $R^2=0.28$ ,  $p<0.001$ ). Femininity contributed to a larger proportion of variance ( $R^2=0.19$ ,  $p<0.001$ ); when femininity was partialled out, masculinity contributed to an additional 0.09% of the variances. Initiation, a task-oriented style, was significantly predicted by masculinity ( $R^2=0.08$ ,  $p<0.01$ ) for this pooled sample. This result is consistent with the femininity/masculinity; person/task dichotomy.

## Study II-Gender Traits and Achievement Motivation

In the second study, we surveyed gender traits of secondary school students ( $N=184$ , 87 males and 97 females; average age 15) and their achievement motivation. Gender traits in this study were measured with a Chinese Sex Role Inventory (CSRI) (Hui and Wong, 1992) developed in Hong Kong. CSRI was derived on the basis of the Chinese Adjective Check List (Yang and Li, 1971). CSRI contains items that can be considered culture-specific to the Chinese. As in study 1, the CSRI was independently reviewed by a small group of Singaporean male and female students to judge the appropriateness of the traits for males and for females. Cronbach alpha values calculated for both the masculinity and femininity scale were found to be within the acceptable range (alpha of M=0.83; alpha of F=0.77). Correlation coefficient between M and F scales was 0.54 ( $p<0.001$ ). We obtained essentially the same result: that there is an even distribution of gender traits across both sexes (see Tables 2a, b, c, d and Figure 2).

In addition to the analysis of variance of WOFO, stepwise regression was also performed. It was found that for the pooled male and female sample, mastery was significantly predicted by masculinity ( $R^2=0.031$ ,  $p<0.05$ ), while work ethics was significantly predicated by femininity ( $R^2=0.055$ ,  $p<0.00$ ). However, competition was not predicted by either gender trait. Masculinity was also found to

Table 2.

**Gender Type and Achievement Motivation Scores Across Sexes****a. Means and Standard Deviations of Masculinity/Femininity Scores for Males and Females.**

	Males(n=87)		Females(n=98)			
	Mean	S.d.	Mean	S.d.	Fratio(df=1.183)	Prob.
Masculinity	91.64	14.99	88.59	16.15	1.7602	0.1863
Femininity	85.14	14.27	82.74	13.80	1.3415	0.2483

**b. Means and Standard Deviations of Achievement Motivation Scores For Males and Females.**

	Males(n=87)		Females(n=98)			
	Mean	S.d.	Mean	S.d.	Fratio(df=1.183)	Prob.
Competition	3.46	0.65	3.51	0.61	0.3239	0.5700
Mastery	3.55	0.44	3.56	0.46	0.0167	0.8974
Work Ethics	3.76	0.51	3.94	0.46	6.2523	0.0133*

\*p&lt;05.

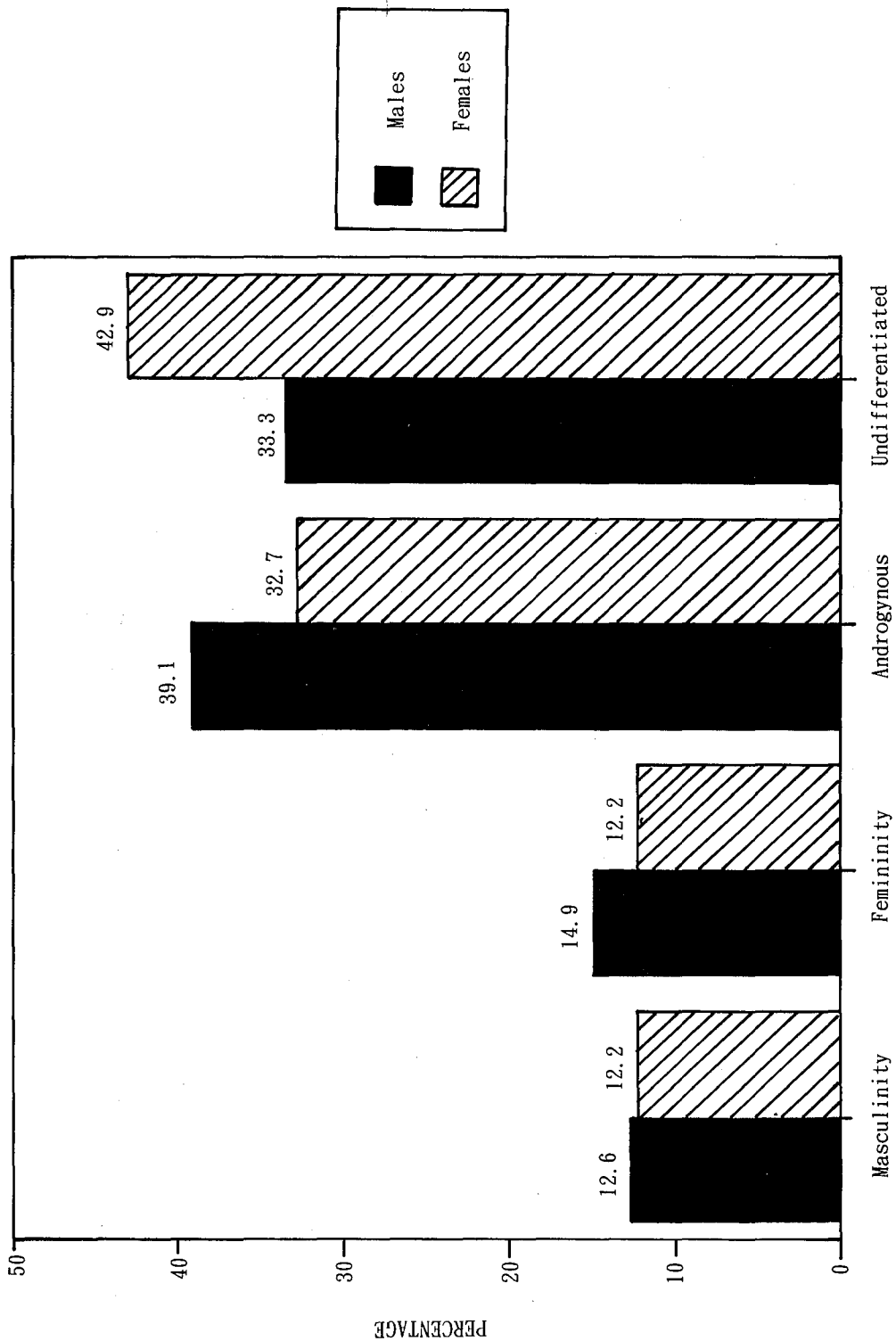
**c. Percentage of Males and Females in Each Gender Type.**

	Masculine	Feminine	Androgynous	Undifferentiated
Males	12.6%	14.9%	39.1%	33.3%
Females	12.2%	12.2%	32.7%	42.9%

**d. Chi-squares For Gender Type Frequencies Between Males and Females.**

Gender Type	Observed Freq.	X2	Df	Prob.
Masculine	males=11 females=12	0.0435	1	0.8348
Feminine	males=13 females=12	0.0400	1	0.8415
Androgynous	males=34 females=32	0.0606	1	0.8055
Undifferentiated	males=29 females=42	2.3803	1	0.1229

Figure 2. Percentage of Male and Female Students by Gender Type.





significantly predict the overall score of WOFO ( $R^2=0.06$ ,  $p<0.01$ ).

## Discussion

These results are somewhat different from Western findings. Two differences are noted here: (1) When gender traits are measured as personality variables, there are no sex differences; and (2) motivations and behaviours predictable by gender traits are also evenly distributed across sexes.

The relatively high alpha values of the M and F scales of both the PAQ and CSRI indicate that the concepts of masculinity and femininity are highly reliable and coherent concepts in Singaporean Chinese. Independent evaluation of face validity of the measures also found them to be appropriate measures of male and females characteristics.

In both studies, the femininity measure and the masculinity measure were found to be positively correlated with each other. In study 2 they were significantly correlated ( $p<.001$ ); in study 1 the magnitude of  $r$  barely missed the significant level ( $p=.06$ ). These results concur with the earlier finding by Maznah and Choo on Malaysian Malay and Chinese students.

Since the findings are consistent across two different samples, using two instruments developed independently of each other, it is felt that the findings reflect an inherent nature of gender traits in Singapore.

### The Culture Context of Singaporean Chinese: Achievement and Social Sensitivity

It is suggested that the prevailing value structure of Chinese Singaporeans, one that emphasizes both achievement (task; instrumental) and civic harmony (social: expressive) (Chang and Wong, 1995), provides the context in which the effect of gender is moderated. The emphasis of social, expressive values by the Chinese perhaps contributed to the relative, more feminine rating of

Singaporeans in Hofstede's cross-national study of Work Values.

It is proposed that under this value environment, the importance of both task-oriented striving and social-oriented interpersonal sensibility will be internalized by the individual regardless of sex. Masculinity and femininity measured by either Western designed instruments, such as the PAQ, or indigenous instruments, such as the CSRI, reflect the core masculinity/femininity of task/social dichotomy. In cultures where social sensitivity is equally emphasized for males and females, the femininity trait will be socialized in both sexes.

While it was not our intention to test the theory of androgyny (Bem, 1974), this consistent finding inadvertently suggests a balanced development of masculinity and femininity traits of Singaporeans.

#### **Gender Traits and Sex Role Behaviour**

Our findings seem to contradict long-held impressions about the Asians, that is, at the behavioral level, they seem to be highly sex-typed (Wong & Leong, 1993). How do we explain this apparent paradox ? A number of plausible explanations are proposed here: (1) Sex as a structural role category; (2) differences in public and private presentations of the self and (3) role-guided manifestation of underlying gender traits.

It is proposed that the answer may lie in Deaux (1984)'s theorization on structural categories in social organization and the Asian tendency of compartmentalizing different domains of life. Social structure or perceived social categories affect an individual's personal identity and guide the individual's behaviour with appropriate role-prescribed scripts. Literature abound in documentation of the role-guided social behaviour of the Asians. We now have empirical evidence to suggest that the Chinese and the Japanese are highly sensitive to situational cues in their self presentation (Cousins, 1989).

Reviewing a decade of studies in gender traits and sex role behaviour, Spence (1985) wrote: "Gender is pervasive but gender effects do not reside solely in the person or situation....." (p.172). She further observed: ".... We have

gained an increased appreciation of the role of situational factors..... Self-presentation strategies, expectation states and other concepts that have been formulated to recognize the importance of interaction processes in the development and maintenance of gender-related behaviours move us considerably beyond the more static conception of gender as a psychological determinant..." (p.172).

For the more situation-sensitive Chinese, it is logical to expect that the presentation of self in social situations may differ from the private reflection of personality traits, that is, there might be more inconsistency between the public and the private self.

### **Social Category/Role Guided Public Presentation**

In Asian societies, especially the Chinese, males and females are classified into distinctively different categories. Each category of people is accorded with clearly defined social roles. These roles prescribe scripts for proper behaviours of males and females in social situations. They are guidelines for public domains, that is, social behaviour.

### **Self-rating as Private Presentation**

Personality traits are personal, individual characteristics of the self, the private domain. Social behaviour and public presentation of the Chinese may follow the strict guideline of role expectations while the private reflection will reveal individual characteristics attributable to the private aspect of the self. Tools to measure gender traits are self-rating scales. The surveys were conducted anonymously. The subjects were assured of confidentiality. Thus, the survey situation can be construed as a 'private' situation where the Asians were found to reveal more of the 'private self', the part of the self that contains personal characteristics of the individual.

### **Sex Role Guided Manifestation of Gender Traits**

The potential behaviour-trait inconsistency can also be explained in terms of

cultural-influenced manifestations of individual traits and motivations. Masculinity trait in Chinese females may be expressed in the personal striving of goals that are sanctioned by the society such as assisting the men in their lives, husbands, sons or brothers, to achieve in education, career and business. Likewise, Chinese men may manifest their femininity in being committed family men, caring friends, and supportive supervisors in literary or artistic pursuits.

What we have found in Singapore may be a common cultural phenomenon of a number of countries. It would be interesting to compare data from other cultures which also place high emphases in interpersonal sensitivity, such as that of Thailand or the Philippines, to gain a better understanding of the relationship between gender traits, cultural values and social behaviours.

## References

Almeida, E.

- 1980 Factors related to changing sex-roles: A cross national study of four countries. Report to UNESCO.

Bem, S. L.

- 1974 The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.

Block, J.

- 1973 Conceptions of sex-roles; some cross-cultural and longitudinal perspectives. American psychologist, 28, 512-526.

Chang, W. C., & Tam, M.

- 1994 The Yin and Yang of Personality and Leadership Behaviour in Singapore. Paper presented at the XIIth Congress of Cross-cultural Psychology, Pamplona, Spain, July, 1994.

Chang, W. C. & Wong, W. K.

- 1995 Rational traditionalism: Chinese values in Singapore. Paper presented at the Vth Singapore- Malaysian Forum, Singapore, December 11-14.

Cousins, S. D.

- 1989 Culture and self-perception in Japan and the United States. Journal of Personality and Social Psychology, 56, 124-131.

Deaux, K.

- 1984 From individual differences to social categories: Analysis of a decade's research on gender. American Psychologist, 39(2), 105-116.

Feldman, S. S., Biringen, Z. C., & Nash, S. C.

- 1981 Fluctuations of sex related self-attributions as a function of stage of family life cycle. Developmental Psychology, 17, 24-35.

Hall, J. A., & Hallberstadt, A. G.

- 1980 Masculinity and femininity in children: Development of the Children's Personal Attribute Questionnaire. Developmental Psychology, 16, 270-280.

Hofstede, G.

- 1980 Culture's consequences. Newbury Park, Cal.: Sage Publications.

Hofstede, G.

- 1994 Gender stereotypes and partner preferences of young working women in eight Asian cities. Paper presented at the XIIth Congress of Cross-cultural Psychology, Pamplona, Spain, July 26, 1994.

Hui, H. C., & Wong, H. L.

- 1992 Measuring psychological androgyny in an oriental culture. Working paper. Department of Psychology, Hong Kong University.

Maznah, I. & Choo, P. F.

- 1986 The factor structure of the Bem Sex Role Inventory (BSRI). International Journal of Psychology, 21, 31-41.

O'Connor, K., Mann, D. W., & Bardwick, J. M.

- 1978 Androgyny and self-esteem in the upper middle class: A replication of Spence. Journal of Consulting and Clinical Psychology, 46, 1168-1169.

Romer, N. & Cherry, D.

- 1980 Ethnic and social class differences in children's sex role concepts. Sex Roles, 6, 246-263.

Runge, T. E., Frey, D., Gollwitzer, P. M., Helmreich, R. L., & Spence, J. T.

- 1981 Masculine (instrumental) and feminine (expressive) traits: A comparison between students in the United States and West Germany. Journal of Cross-cultural Psychology, 12, 142-146.

Spence, J. T.

- 1985 Sex roles in contemporary American society. In G. Lindzey and E. Aronson (Eds.). Handbook of social psychology: Special fields and applications, Volume II. New York: Random House.

Spence, J. T., & Helmreich, R.

- 1978 Masculinity & femininity: Their psychological dimensions, correlates and antecedents. Austin: University of Texas Press.

Spence, J. T., Helmreich, R. L., & Stapp, J.

- 1975 Rating of self and peers on sex-role attributes and their relation to self esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology, 32, 29-39.

Spence, J. T., Helmreich, R. L., & Stapp, J.

- 1977 The Personal Attribute Questionnaire: A self-report inventory of sex role stereotypes and masculinity and femininity. JSAS Catalog of Selected Documents of Psychology, 4, 43.

Taylor, M. C., & Hall, J. A.

- 1982 Psychological androgyny: A review and reformulation of theories, methods and conclusions. Psychological Bulletin, 92, 347-366.

Ward, C., & Sethi, R. R.

- 1986 Cross-cultural validation of the Bem Sex Role Inventory: Malaysian and South Indian research. Journal of Cross-cultural Psychology, 17, 300-314.

Williams, J. E., & Best D. L.

- 1992 Sex and psyche: Gender and self- viewed cross-culturally. Newbury Park, California: Sage Publications.

Wong, A. K., & Leong, W. K. (Eds.).

- 1993 Women in Singapore: Three decades of changes. Singapore: Times Academic Press.

Yang, K. S., & Li, P. H.

- 1971 Desirability, meaningfulness and familiarity ratings of 557 Chinese personality-trait adjectives. Acta Psychologica Taiwanica, 13, 36-57.

# 新加坡兩性心理特徵

居維寧\*

## (中文摘要)

在新加坡從事的兩項研究中呈現出新加坡華人兩性心理特徵的現象：新加坡華人男女經理及中學生的男性化及女性化心理特徵非常相近；即無男生傾向男性化或女生傾向女性化的現象，而男性心性特徵與女性心理特徵之間有一個正面的統計相關性。這與西方一般兩性心理學的研究結果有很基本的差異。

第一項研究的對象是經理人員，用的是美國BEM製作的性別角色特徵。第二項是對男女中學生的調查，用的是香港許志超以華文製作的華人性別角色特徵量表。而這結果呈現於這二項截然不同的研究中，可見不是一個偶發現象。筆者認為華人價值觀中對男女都要求成就進取及敦睦體恤的價值是此現象的文化基礎。

關鍵字：男女角色性徵、亞洲文化、自我觀念

---

\*作者為國立新加坡大學社會工作及心理學系副教授。



## A Research Note: Gender Traits in Singapore

*Weining C. Chang*

### (ABSTRACT)

A recurrent theme was noted in the findings of two studies involving gender traits --- masculinity/femininity --- in Singapore. In both studies, gender traits were found to be evenly distributed across male and female subjects. In contrast to reported Western findings, the majority of the subjects fell into the non-sex typed categories: androgynous and undifferentiated. This finding was consistent across the two studies of different age groups (teenagers versus adults), different demographic indicators (students versus managers) and across two different measures: the Personal Attribute Questionnaire and a Chinese Sex Role Inventory developed in Hong Kong. Cultural values which emphasize both social sensitivity and achievement in both males and females were cited as potential explanations.

**Key Words:** Gender traits, Asian cultures, Self concept.