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Sex Role Identity by Gender & Socioeconomic Status and the Association with Academic Performance: A Comparison of American and Korean Student Groups[†]

This survey examined sex role identities (androgyny, masculinity, femininity, and undifferentiated), gender, and academic achievement scores from an international sampling of college students. For a comparison, American students and Korean students responded to survey questions on the Bem Sex Role Inventory and the Korean Sex Role Inventory respectively, reported family socio-economic status and achievement scores on the American College Testing (ACT) or Korean Scholastic Ability Test (KSAT). Results in this study indicate that a higher percentage of American students report an androgynous or undifferentiated gender role identity than do Koreans, while Korean students are more likely to show a feminine gender role identity than Americans. Although American students reported higher levels of androgyny in their gender role identity, those who fit the feminine gender role identity group showed higher ACT scores than other gender role identity types. However, in the Korean sample, the masculine gender role identity produced a higher academic achievement for both males and females.

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Sandra Bem (1974) developed The Bem Sex Role Inventory (BSRI) scale and subsequent attempts have been made in academia to understand how the concept is related to social and economic factors (Ballard-Reisch & Elton, 1992; Ward, 2000; Zhang, Norvilitis & Jin, 2001). Several studies explored the relationships between four categories of sex role orientation (masculinity, femininity, androgyny, and undifferentiated) and various aspects of social behaviors, such as parent-child interactions (Jang *et al*., 2002; Kong & Choi, 1994; McBroom, 1981; Yang, 2000), pattern of career/job searching (Brown *et al*., 2007), and health-related behavior (Park & Park, 1999).

Important questions remain unanswered in understanding the complex relationships between sex role identity and academic achievement, socioeconomic status, and gender. In the last two decades, a new academic approach has attempted to broaden the scope of the socio-cultural aspects of the concept by comparing the results of the Bem Sex Role Inventory measurement scale from culturally different societies, i.e., Korean Sex Role Inventory (Jeong, 1990), Japanese Sex Role Inventory (Katsurada & Sugihara, 1999), and the Singapore Androgyny Inventory (Ward, 2000). A comparative approach provides insight into the socio-cultural dimensions of sex role identity and can elucidate relationships previously unexplored. This study makes a descriptive

comparison of sex role identity by gender, socioeconomic status, and the connection to academic performance between samples of Korean and American college students.

REVIEW OF LITERATURE

The cross-cultural study of sex role identity (or orientation) has attracted recent scholarly attention (Chung, 1986; Maccoby, 1988; Pei-Hui & Ward, 1994; Ward, 2000; Zhang *et al*., 2001). It is assumed that the measurements of sex role identity in different cultural settings (or ethnicity) via the BSRI provides important information on cultural variations in the definitions of masculinity and femininity across different cultures (Harris, 1994). The BSRI is recognized as a valid measurement for the cross-cultural study of sex role identity because the scales of BSRI were constructed "not on the characteristics that men and women actually show, but on characteristics considered more desirable for men or for women (Zhang *et al*., 2001:238). Desirable and traditional patterns in the characteristics of sex role orientation in various societies around the world have been found to be similar (Best & Williams, 1993: 216). Adler (1993) remarked both cross-cultural and subcultural variations in gender roles and circumstances reflect the interaction of gender, race, age, ethnicity, class and caste, sexual orientation, and other factors that define identity and social status in various societies and cultures (p.xiii).

Studies have found a positive correlation between psychological androgyny and socioeconomic factors (Earle & Harris, 1989; Kierscht & Rice, 1981: figures 1; Kim, M. 2003; McCandless, Lueptow & McClendon, 1989; Ravinder, 1987). Kierscht and Rice (1981) reported that androgyny increased with higher level of socioeconomic status among young children, kindergartners, and 1st to 3rd graders. Using two samples of high school students, McCandless and others (1989) observed that sex role differentiation was greater among higher family SES groups. Earle and Harris (1989) found that the educational status of parents and the occupational status of fathers were significant predictors of a liberal gender identity when blue-collar workers and university students were compared. Ravinder (1987) questioned whether androgyny is really prevalent among educated and middle class people in Western society by comparing the sex role identity of college students in India and Australia and argued that androgyny can be found in traditional cultures of India (especially among males) while Australian society shows more gender role transcendence. Shukla and Kapoor (1990) showed the existence of similarity among American and Indian upper-middle class families in decision-making power, marital satisfaction, and sex role identity.

A positive relation between psychological androgyny and academic performance has been established in previous literature (Brewer & Blum, 1979; Choi, 2004; Heilbrun & Han, 1986; Markstorm-Adams, 1995; Olds & Shaver, 1980). However, the relationship is positive in a partial and complicated way. Heilbrun and Han (1986) reported that androgynous female students scored higher on the measures of academic achievement than non-androgynous female students, but no difference was found among male students of different identities. Confirming previous studies, Choi (2004) found that both the groups high in androgyny and masculinity had higher academic efficacy. In addition, a number of studies note social cognitive factors play a moderating role in the relations (Brown *et. al*., 2007; Hong & Rust, 1989; Oh, 2003). However, few studies utilized the cross-cultural comparative approach to the relationship between psychological androgyny and academic achievement.

Studies exploring the relationship between sex role orientation and gender have been inconsistent (Hoffman, 1995; Lee, 1991; Oh & Park, 2006; Tomeh, 1981). For instance, Hoffman (1995) argued that a deeper intimacy in Korean culture exists exclusively between men and women that blurs the concepts of self and gender identity found in the U.S. male- female relationships. In contrast, Oh and Park (2006) found a significant difference between male and female students in gender role identity. When they conducted surveys on the relationship between sex role identity and family group characteristics, there was a high prevalence of androgyny in females

(31.9%) and prevalence of masculinity in males (39.4%) in a Korean university sample. A limited number of studies that compares the sex role identity across the Korean and American samples have been undertaken. Chung (1986) conducted a survey examining the relationship between the sex-role identity and self-esteem of Korean and U.S. college students, questioning whether androgyny or masculinity is more important in explaining the variation in self-esteem. Lee (1991) investigated how gender, sex role identity, and cultural factors all affect self-control and self-satisfaction among Korean and American college students.

Considering the current state of the literature, this study examines the following hypothetical relationships:

(1) There will be a different distribution of sex role identity in the two samples of Korean and American students; psychological androgyny will be more frequently found in the American sample than the Korean one.
(2) Groups of androgyny or masculinity will be related to better academic performance in both the American and Korean sample.
(3) Proportions of androgyny will be higher in the middle and higher socioeconomic strata in both societies, and masculinity and femininity by gender will be dissimilar among these societies.

A comparison of the descriptive results from the samples of Korea will provide a more insightful perspective about psychological androgyny as well as the other mentioned gender role orientations, in addition to the relationship to social factors such as gender and SES. This study will enhance the understanding of researchers in the similarities and differences between Korean and American cultures and the implications in their social lives.

METHODS AND DATA ANALYSIS

Participants and Data Collection

The samples for this study consist of a total of 401 college students, 228 (56.9%) Korean students (108 males and 120 females) and 173 (43.1%) American students (107 males and 66 females). In the total sample of those surveyed, 215 are male (53.6%) and 186 female (46.1%). The collection of data was made by visiting sociology classes in Korea and the U.S. in 2005. Classes at, Hanshin University (Kyunggi-Do Province) and Korea University (Seoul) formed the Korean sample; Northwest Missouri State University and Kansas State University formed the U.S. sample. The approval for the use of human research subjects in both Korea and the U.S. was obtained through the committees of the Internal Review Board in Northwest Missouri State University and Kansas State University.

Instruments

This study used the Bem Sex Role Inventory for the measurement of gender role identity in the U.S. and the Korean Sex Role Inventory for the Korean sample. Students in the American sample completed the Bem Sex Role Inventory (Bem, 1974) for the measurement of sex role identity. The Bem Sex Role inventory contains sixty items that are traditionally masculine (e.g., assertive, willing to take risks), traditionally feminine (e.g., gentle, understanding), and neutral (e.g., happy, conceited). The items are on a seven point scale (1 = never to 7 = always), related to how well each of the characteristics describe themselves. Each subject receives three scores of masculinity, femininity, and androgyny. The score of androgyny "reflects the relative amount of masculinity and femininity," and is specifically "defined as student's t ratio for the difference between a person's masculine and feminine self-endorsement" (Bem, 1974: 158). The reliability of the scale for the American sample was a Cronbach a = .85 (Bem, 1977). This study used the Korean Sex Role Inventory (KSRI), which is a revised version of the Bem Sex Role Inventory, to culturally fit Korean constructs of gender (Jeong, 1990) for the Korean student sample. The reliability of the Korean Sex Role Inventory for the current sample was a Cronbach $\alpha = .83$ (with $\alpha = .78$ in masculinity; $\alpha = .79$ in femininity).

The socioeconomic status (SES) is measured by combining the social, economic, and educational

status of a family through proportionate weighing (e.g., family income 50%, parents' occupation 25%, and educational level 25%) for a balanced approach to the concept. The sample shows that the Korean sample consists of 37.4% low SES, 52.4% middle, and high 10.2% upper; while 24.3% of the American sample was low SES, 57.8% was middle, and 17.9% was upper SES, respectively. Academic achievement is measured by asking subjects for their American College Testing (ACT) scores in the U.S. and Korean College Scholastic Test (KSAT) scores in Korea. The range of ACT score is 14 to 36 and KSAT score of Korea, 199 to 400. The data in this study is analyzed by describing the variation of frequencies of sex role identity by gender and SES in the U.S. and Korea. The discussions of results are based on a cultural interpretation that focus on the variation of androgyny by gender and SES, and the relation between androgyny and academic achievement in both societies.

RESULTS

Table 1 shows the comparable frequencies of sex role identity of Korea and the U.S. considering gender and socioeconomic status. While the androgyny group is the biggest proportion in the American sample (32% for males and 29% females), it is the group of femininity (for males 27%, and females 30%) in the Korean sample. The proportion of androgyny in the U.S. sample is larger than in the Korean sample, especially in the middle and upper class brackets, regardless of gender. It is thought that the bigger proportion of androgyny in the American sample might be related to increases in life expectancy and the participation of women in the labor force that favors androgynous identity and lessens the importance of sex differences in the society (Ravinder, 1987). The higher proportion of androgyny among high SES subjects in the Korean sample might be related to the fact that Korean society is experiencing rapid economic growth and globalization that could be part of a larger trend toward Americanized gender relations. In the Korean sample, the tendency for middle SES students to be concentrated in the femininity group (17% of male and 18% of female) might be linked to the fact that Korean society has been widely experiencing a feminization of gender role identity

Table 1. *Sex Role Identity of Korean and American Students by Gender & Socioeconomic Status*

	Gender	SES	Androgyny	Masculine	Femininity	Undiff*	Total (%)
Korea	Male	Low	12	7	8	13	40
		Middle	7	12	17	14	50
		High	3	2	2	3	10
		Total	**22**	**21**	**27**	**30**	**100 (100)****
	Female	Low	7	4	10	15	36
		Middle	11	9	18	15	53
		High	3	2	2	4	11
		Total	**21**	**15**	**30**	**34**	**100 (115)**
U.S.	Male	Low	7	6	3	8	24
		Middle	20	12	7	25	64
		High	5	2	4	1	12
		Total	**32**	**20**	**14**	**34**	**100 (105)**
	Female	Low	8	0	7	5	20
		Middle	16	2	8	27	53
		High	5	2	7	13	27
		Total	**29**	**4**	**22**	**45**	**100 (61)**

* Undifferentiated

** Numbers in parenthesis are frequency of four groups (male and female of Korean and American students)

(Lee & Park, 2006).

The higher proportion of femininity in the Korean sample as a whole (27% for males and 30% females) as well as the 15% of masculinity among Korean females (compared to 4% of it among American females), are possibly related to the historical background of a Korean society based on Confucianism. The traditions of Confucianism emphasized different roles and attitudes of men and women in everyday lives, although there is a tendency of blurring the gender categories in modern and urban Korean society (Hoffman, 1995). It is notable that there is no statistically significant difference in the sex role identity between American males and Korean males, but a statistical significance (χ^2 (3) = 10.13, $p < .05$) is found between the groups of American females and Korean females.

Table 2 and 3 provide the mean scores of academic performance, KSAT in Korea and ACT in the U.S., by sex role identity and gender. The hypothetical expectation that the group of androgyny will demonstrate better academic performances is partially found in the Korean sample, but not in the American one. Korean students with masculinity showed the highest score, 341.3, followed by androgyny with 323.5, in the KSAT exam in their reports. It confirms the previous studies where students with androgyny and masculinity have higher academic achievement. However, American students who are categorized as the femininity group reported the highest ACT scores, 25.1 by male and 25.4 by females, while the ACT scores of the androgyny group were 22.5 for males and 23.6 for females. This reflects the current trend of American society that more female students are enrolling in colleges and have made overall improvements in academia and work place status. However, there is no statistically significant relationship between androgyny and academic performance in the observation.

The academic performance by Korean male students has been affected by socioeconomic status overall (F (2,81) = 3.998, $p < 0.05$); it is confirmed by the significant correlations, ($r = 2.63$ at 2-tailed significance of .05) between KSAT score and the work category of the father. The difference in academic performance between American male in the androgyny group (ACT 22.5) and in the feminine group (ACT 25.08) students is notable (t-score of - 2.541 at 2-tailed significance of .015). It is also important to note that the academic performance of American male students has been less influenced by socioeconomic status, but more by gender role identity (F (3,94) = 3.585, $p < 0.05$).

Table 2. *Mean of KSAT (Korea) by Sex Role Identity*

	Male		Female	
	M	SD	M	SD
Androgyny	323.5(17)	42.2	315.7(19)	62.6
Masculinity	341.3(19)	40.3	324.3(13)	51.9
Femininity	325.5(22)	43.4	292.1(21)	60.7
Undifferentiated	316.8(26)	59.3	305.9(29)	53.8

* Number in parenthesis is the frequency of group
* The range of KSAT is 199 and 400

Table 3. *Mean of ACT (U.S.) by Sex Role Identity*

	Male		Female	
	M	SD	M	SD
Androgyny	22.5(30)	2.7	23.6 (18)	3.5
Masculinity	23.0(20)	2.9	21.0 (2)	1.4
Femininity	25.1(13)	3.8	25.4(10)	3.1
Undifferentiated	23.7(35)	3.9	23.7(25)	3.6

* Number in parenthesis is the frequency of group
* The highest score of ACT is 36.

DISCUSSION

An important observation is that the majority of Bem Sex Role Inventory scores (masculinity and femininity) among Korean students are lower than that of Americans. It is reminiscent of the study by Zhang *et al.* (2001) that the Bem Sex Role Inventory scores for the Chinese sample were lower than the American sample and Chinese males show less masculine orientation than American males. It is from the existence of cultural influences in the Confucian tradition that stress moderate behavior and taking a conservative attitude (Zhang *et al.*, 2001). In addition, Korean society has been

experiencing rapid changes of sex roles between women and men due to the fast economic growth and globalization (Kim, 1993).

This study found that there is no significant difference between men and women in both societies in terms of sex role identity. An exceptional one is that the proportion of masculinity among U.S. females is very low, 4%, compared to the 15% of Korean women, this might require further scholarly examination. However, the findings in this study are not inconsistent with Hoffman's observation (1995), which is contrary to the predominant view of gender for Asian societies. There is a strong tendency of blurring selves and gender in Korean culture that emphasizes the intimacy between men and women while equality and non-differentiation are pervasive in the U.S.

This study compared the results of the Bem Sex Role Inventory and Korean Sex Role Inventory as the tools to measure sex role identities in both Korean and American societies. This study reveals a consistent result to previous studies In the relationship between sex role identity and socioeconomic status. However, it is necessary to examine the relationship in a longitudinal approach to comprehend the societal transitions of sex role identity from the globalizing contexts.

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