

## GENDER-ROLE PERSONALITY TRAITS IN JAPANESE CULTURE

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The etic (universal) aspect of gender-role personality traits was examined in Japanese culture. The Bem Sex Role Inventory (BSRI; Bem, 1974, 1977) was validated for the Japanese culture and modified for this study. An investigation of the personality traits among 1,227 college students using the Japanese BSRI indicated that male students scored significantly higher on the Masculine scale than the female students, whereas they did not differ from each other on the Feminine scale. It was also found that both female and male students scored significantly higher on the Femininity than on the Masculinity scale.

Numerous studies have been conducted on gender roles over the last two decades. Gender roles were initially conceptualized from a bipolar perspective, which placed femininity and masculinity at the opposite ends of the pole (Terman & Miles, 1936). The bipolar perspective of gender roles was criticized by social scientists as being too simplistic and as not accurately discriminating males from females (Bernard, 1981; Constantinople, 1973; Jenkin & Vroegh, 1969; Murrey, 1963; Webster, 1953).

Sandra Bem (1974) conceptualized femininity and masculinity as two separate constructs and explained gender roles from a bidimensional perspective instead of a unidimensional perspective. She argued that sex-typed individuals are attuned to culturally defined standards of being feminine and masculine and try to adopt these behaviors, whereas androgynous individuals are flexible in adopting culturally defined sex-typed behaviors. She developed the Bem Sex Role Inventory (BSRI; 1974, 1977) based on her theory of androgyny. The scale has been widely used for gender-role research (Brewer & Blum, 1979; Feather, 1984; Fischer & Narus, 1981; Lobel, Slone, & Winch, 1997; Spence, 1993), despite criticisms of its theoretical conceptualization, validity, and item selections (Bernard, 1980; Hogan, 1977; Kimlicka, Wakefield, & Friedman, 1980; Pedhazur & Tetenbaum, 1979; Spence & Helmreich, 1979; Walkup & Abbott, 1978; Whetton & Swindells, 1977).

Researchers have extended gender-role study to different cultures. Cross-cultural gender-role studies have been

divided mainly into three categories: scale validation and descriptive studies of gender roles in a target culture (Lara-Cantú & Navarro-Arias, 1987; Lobel et al., 1997; Ward & Sethi, 1986), comparison studies of two different cultures (Basow, 1984; Gackebach, 1981; Hogan, 1979; Novakovic & Kidd, 1988), and comparison studies between gender roles and other variables in target cultures (Chia, Moore, Lam, Chuang, & Cheng, 1994; Lobel et al., 1997). The majority of cross-cultural studies have used Western-based measures to examine gender roles in target cultures. Results have been consistent in finding that each culture has both emic (culture specific) and etic (universal) aspects of gender roles, and that adaptation of the scales developed in Western culture warrants careful examination and consideration (Lobel et al., 1997; Ward & Sethi, 1986).

### GENDER-ROLE STUDIES IN JAPAN

Gender-role study in Japan started with a validation of scales developed in Western culture. Nishiyama (1975) conducted a cross-cultural study on gender-related personality traits using the Femininity scale of the California Psychological Inventory (CPI). The results indicated that, on the Femininity scale, Japanese men scored highest among men and women scored fourth highest among women from nine nations, whereas Japanese women scored significantly higher than Japanese men. The study also found that some of the items identified as masculine by American samples were scored significantly higher in women than in men in Japanese culture. The results indicated some limitations in applying cross-culturally a measure derived from U.S. culture.

Attempts were made to develop a Japanese gender-role scale. Kashiwagi (1967, 1972) developed a 29-item self-

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report questionnaire about gender-role development among adolescents. The study found that women's recognition of gender-role differences between the sexes increased along with their age, whereas their scores on the Feminine scale decreased. The results also indicated a big discrepancy between women's perception of gender-roles and their self-ratings. Yamaguchi (1985) developed a 45-item questionnaire to investigate developmental aspects of gender stereotypes. The findings indicated that men developed a conception of gender stereotypes in their early teens, whereas women did so in their mid-teens. Y. Ito's (1978) study with a 30-item self-report questionnaire showed that both sexes had gender-specific expectations toward men and women. The finding was consistent with the results of the previous study (Kashiwagi, 1972). The study also found a significant discrepancy between female subjects' self-rated gender-role personality traits and socially desirable gender-role personality traits for women, with self-rated femininity being lower and self-rated masculinity being higher than the social desirability ratings.

Critical limitations of these studies were in the areas of item selection and scale validation. The scale consisted of a mixture of personality traits (e.g., warm, dedicated), physical descriptions (e.g., having a high-pitched voice, curvaceous), and behaviors (e.g., raising a child, accepting sex life, supporting a family). As a result, the scale tapped into gender-role behavior, gender-role personality, and gender identity. The procedure for item selection in the studies was not specified. Moreover, no reliability or validity was reported in these studies.

Shimonaka, Nakazato, and Kawaai (1990) and Shimonaka, Nakazato, Kawaai, and Sato (1997) used the BSRI to examine gender roles among an elderly Japanese population. They found that androgynous individuals, both men and women, showed good adjustment across the life span. This study was limited due to the failure of scale validation and a questionable procedure of translation. The study did not follow the back-translation method recommended for adaptation of a psychological test into a language of a different culture (Brislin, 1970, 1993; Butcher, Lim, & Nezami, 1998). The BSRI was simply translated into Japanese and administered to an elderly Japanese population. In addition, a scale validation was not conducted. Gender roles are specific to the culture, and the instruments used to measure them reflect the social desirability of gender roles in the culture where they were developed; thus test validation in a target culture is essential in cross-cultural studies (Butcher et al., 1998). A failure to validate the scale before its use in a cross-cultural study compromises the findings. A previous study (Sugihara & Katsurada, 1999) indicated a need for validation of the BSRI scale before its use in Japanese culture. A BSRI given to Japanese college students showed that a substantial number of the BSRI items did not differentiate men from women. Moreover, male college students obtained Femininity scores higher than their Masculinity scores. This could be due to different gender stereotypes in the culture. Japanese society expects men and women to have both masculine and

feminine characteristics. An explanation may lie in the small and nonstandardized sample characteristics. Another explanation might lie in the BSRI scale itself. The BSRI items contain both etic and emic aspects of the gender-related personality traits found in U.S. culture, and so the BSRI items reflecting the etic aspect of personality traits describe only a partial aspect of gender-related personalities in Japanese society. A careful validation study on the BSRI in Japanese culture is warranted before it is used.

### HISTORICAL BACKGROUND OF JAPANESE GENDER ROLES

Originally a matriarchal society, Japan turned to patriarchal rule through the strong influence of a highly patriarchal China in its early history. Women who had dominance and power over men gradually fell into a status of subservience. Confucianism was the underlying thought of a strong patriarchal ideal in China. It stressed a hierarchical society where strong male dominance was assumed. It also emphasized internal qualities such as integrity and righteousness (Reischauer & Craig, 1973).

The fall of the *uji* (clan) system further facilitated inequality between sexes. For example, although both men and women kept their family name and property after marriage under the clan system, the newly developed *ie* (house) system forced women to change their family names upon marriage and restricted their freedom to control their inheritances from their own families. This made women's status more unstable and weak. Moreover, the warrior ethics set a subordinate relationship in the house. The husband-wife relationship was characterized by the wife's absolute dependence, dedication, and subordination to her husband.

The establishment of the *ie* system institutionalized a gendered division of labor and a power imbalance between men and women. Under the law only men could inherit family property and the family name, and they had power over the family members, whereas women did not have a right to own property or to participate in matters outside the home. The books used to educate women discussed a woman's duty to admire her husband, who was considered as superior in many aspects as a god (Otake, 1977).

The long and strong influence of Confucianism and the *ie* system ruled Japanese society and established a firm basis for a gendered division of labor and an idea of androcentrism (Bem, 1993), and ever since social practice has been directed and restricted in different ways for men and women. Although the modern constitution declares that all citizens are equal, the traditional social systems and laws, which were established on the basis of gender inequality, still have a strong influence on many aspects of people's lives in Japan.

### GENDER-RELATED PERSONALITY TRAITS IN PRESENT-DAY JAPAN

A distinct set of expectations toward men and women consequently determined a different set of desirable personality traits for men and women. Men are characterized as

being aggressive, independent, objective, dominant, competitive, confident, and analytical; they are expected to be leaders, risk-takers, and decision-makers. Women are characterized as being tactful, gentle, affectionate, sensitive to others' feelings, and quiet and as speaking without harsh language (Azuma, 1979). These sex-typed personalities are considered to reflect "normal," healthy, adjusted personalities in Japanese society. Healthy and adjusted mature women are considered to be less dominant, independent, and risk-taking and more subjective, conceited, and weaker than men (Azuma, 1979). Comparing the United States with Japan, Azuma concluded that the two cultures share similar gender stereotypes, and that across the generations people share similar gender stereotypes. Another study (Williams & Best, 1990) concurred that we share similar gender stereotypes across cultures.

People in Japanese society are not free from cultural androcentrism and have a different set of expectations and social practices toward men and women. Through acculturation, both men and women internalize the cultural expectations for each sex as well as the androcentrism in the society, and they also learn "gender-polarizing" ways of looking at reality, which shape boys and girls to be gendered men and women (Bem, 1993).

Identifying and learning the different values and social practices of other cultures in the midst of the globalization, individuals have become aware of more options. The educational system established after World War II contributed to this process by teaching gender equality and laid the groundwork for more egalitarian gender roles and ideas. The feminist movement in the 1960s empowered women to free themselves from the cultural gender stereotypes (K. Ito, 1993). Women realized that they have more options than they had before. This realization enabled women to be less constrained by gender stereotypes when forming their own self-conceptions and to be true to their own potentials.

The movement also freed men to some extent from the masculine stereotype in the culture (K. Ito, 1993). Men have been strongly influenced by a work ethic in the post-industrial era. The Confucian ethic of being diligent and loyal to elders and authority was used to establish the work ethic of being diligent and loyal to one's company. As a result, men are expected to work long hours to demonstrate this loyalty; and they are also expected to be subordinate to authority (i.e., the boss and the company). In order to survive in this environment, masculine characteristics are not encouraged; rather, more feminine characteristics such as cooperation, loyalty, and modesty are considered to be ideal qualities for workers (Hamada, 1996). Thus, Japanese men and women have departed from traditional gender stereotypes to establish their own gender identities in modern Japanese society.

Societal changes in modern Japanese society have changed both men's and women's ways of looking at themselves and their perceptions of gender identities. Kashiwagi (1972) and Y. Ito (1978) found that men were less masculine than the expected stereotype for men, whereas women

were less feminine than the stereotype for women. Individuals' perceptions of gender-related personality traits, therefore, have been changed in the direction of men and women being similar in both masculine and feminine traits, even if the gender stereotypes supported by the institutionalized gender roles in the society have not been changed.

In this study, we examine the universal aspect of gender-related personality traits in Japanese society using the BSRI. Using an instrument developed in U.S. culture makes it possible to examine the similarities (etic) and differences (emic) in gender-related personality traits across cultures and to gain a better understanding of the cultural aspects of gender-related personality.

The study consists of two parts. Study 1 examines validity of the BSRI in Japanese society. Study 2 investigates gender-related personality traits among Japanese college students.

## STUDY 1

One of the difficulties in a cross-cultural study of gender-roles is to find an appropriate measure. When a measure developed in Western culture is used in a cross-cultural study, the scale needs to be carefully validated in the target culture. Butcher et al. (1998) suggested a procedure involving back-translation and factor analysis. Back-translation involves translating the measure into the language of the target culture and then translating it back into the original language to assure the accuracy and equivalency of the measure. Other studies also support back-translation of a measure (Brislin, 1970, 1993; Sechrest, Fay, & Zaida, 1972) and factor analysis (Everett & Entekin, 1980; Eysenck, 1987; Watkins, 1989) for cross-cultural use of Western-based measures.

Because of previous use of the BSRI in Japanese society (Dohi, 1988; Shimonaka et al., 1990, 1997) and a relative overlap of the items in Azuma's study (1979), the BSRI was chosen to examine the universal aspect of gender-related personality traits in this study. A preliminary examination of the BSRI's validity (Katsurada & Sugihara, 1999) indicated that the BSRI was relatively valid in Japanese culture. A series of paired *t*-tests on social desirability of the BSRI items among Japanese college students showed that all of the masculine items and 17 feminine items reached statistically significant levels in Japanese culture in the direction of the appropriate sexes, which indicated that the BSRI items were applicable to measure gender-role personality in Japanese culture. Because the previous study (Katsurada & Sugihara, 1999) was limited to *t*-test analysis of the items, we conducted another investigation of the validity of the BSRI.

## METHOD

### Sample

Participating in the study were 310 Japanese college students (112 men, 198 women). They were recruited from nine different institutions across the country: 114 students

in the Kyusyu (south), 100 students in the Kansai (west central), and 96 students in the Kanto (east central) regions. The average age of the participants was 21.1 years old ( $SD = 3.4$ ). There was no statistically significant age difference among the three groups. No statistically significant age difference was found between male college students and female college students. This sample was used to examine social desirability ratings, factor structure, reliability, and means and standard deviations.

### Measures

The BSRI was developed by Sandra Bem in 1974 to measure masculine, feminine, and androgynous personality traits among men and women. The BSRI consists of 60 items (20 feminine, 20 masculine, and 20 nongender-related items) that describe personality characteristics. Participants rate each item on a 7-point scale on how true each of these characteristics is for them. The manual, published in 1978 with some updated information on the BSRI, reported internal consistencies between .75 and .90. Test-retest reliabilities for the Femininity and Masculinity scales for the original BSRI were .82 and .94 among women and .89 and .76 among men. Although the norms were also provided in the manual, the author recommended creating a sample median on the basis of the study sample when a large number of male and female participants are used. Although there is some criticism regarding the validation of the scale (Bernard, 1980; Pedhazur & Tetenbaum, 1979), the scale has been shown to have a relatively good validity in current U.S. culture (Blanchard-Fields, Suhr-Roussel, & Hertzog, 1994; Harris, 1994; Holt & Ellis, 1998).

In the present study, the BSRI was translated using the back-translation method (Brislin, 1970, 1993; Butcher et al., 1998). Two bilingual researchers translated the BSRI into Japanese. A Japanese language professional checked the translation for appropriateness of expressions. Then the Japanese version was translated back into English by a native English speaker to assure the accuracy and equivalency of the measure. The final version of the Japanese BSRI was tested among Japanese college students for its readability. This process revealed that some items (Tactful, Conventional, and Solemn) were difficult to understand. Although the original words were literally translated into Japanese, it appeared that these words were no longer in daily use. Because of this, it was decided to list three words for Solemn and Tactful and to add a brief explanation to Conventional to make these items clearer for the Japanese college students (Sugihara & Katsurada, 1999).

### Procedure

College students in several colleges and universities in Japan were asked to participate in this research. The researchers asked colleagues in the different colleges and universities to collect data. Nine colleagues agreed to collect data in their classes on a volunteer basis; the materials

along with detailed instructions were mailed to them with a return envelope. The translated version of the BSRI was given to the volunteer participants. Using a 7-point scale (1 = not at all desirable to 7 = extremely desirable), the students were asked to rate how desirable each personality characteristic described in the BSRI is in Japanese society. The students were randomly assigned to judge social desirability for either men or women in Japanese culture on each BSRI item.

## RESULTS

### Content Validity

The population sampling method (Haynes, Richard, & Kubany, 1995) was used to test the relevancy of the BSRI items for examining gender-related personality traits in Japanese culture. A total of 25 college students (10 men, 15 women) in a psychology class were asked to list 10 masculine and 10 feminine characteristics in Japanese society. Two researchers and a Japanese language instructor in our college independently examined the list of the characteristics described by the students and determined the equivalency of these words to the translated BSRI items. The examiners agreed that the students came up with 11 masculine and 10 feminine equivalent words.

The Japanese version of the BSRI was given to another 50 college students (25 men, 25 women) to test the BSRI item applicability to the Japanese population. They were asked to identify each BSRI item as masculine, feminine, both masculine and feminine, or either masculine or feminine. The results indicated that all of the masculine items were identified as masculine by more than 50% of the students, and 12 feminine items (Affectionate, Sympathetic, Sensitive To Needs of Others, Eager To Soothe Hurt Feelings, Tender, Loves Children, Gentle, Yielding, Cheerful, Soft-spoken, Does Not Use Harsh Language, and Feminine) were identified as feminine by more than 50% of the students. Eight of these feminine items appeared in the earlier list of the words provided by students. The results indicated that all of the masculine items and the 12 feminine items were relevant for examining gender-related personality traits in Japanese society.

### Social Desirability Ratings of the BSRI Items

To refine the items further, social desirability ratings were examined for all of the masculine items and the 12 feminine items. A series of *t*-tests was performed to examine the difference between social desirability for men and for women. Men rated all of the masculine items as significantly more socially desirable for men than for women and 9 feminine items as more socially desirable for women than for men. Women rated all of the masculine items as significantly more socially desirable for men than for women and 11 feminine items as more socially desirable for women than for men (see Table 1). Despite a significant difference between the sexes being reached on these items,



Table 1

Male and Female Ratings for Social Desirability Ratings and Self-Ratings on the Bem Sex Role Inventory Items

Item	Social Desirability Rating								Self-Rating			
	Male				Female							
			For				For					
	For men (57)		women (54)		For men (97)		women (101)		Male (531)		Female (696)	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Masculine items												
*Defend my own beliefs	5.79	1.24	4.80	1.51 <sup>a</sup>	5.81	1.11	4.27	1.47 <sup>a</sup>	4.62	1.37	5.02	1.40 <sup>b</sup>
*Independent	5.23	1.48	3.65	1.66 <sup>a</sup>	5.53	1.35	3.86	1.66 <sup>a</sup>	4.13	1.56	4.43	1.62 <sup>b</sup>
*Assertive	5.44	1.49	4.15	1.78 <sup>a</sup>	5.51	1.27	3.68	1.55 <sup>a</sup>	3.62	1.43	3.98	1.56
*Strong personality	5.26	1.55	3.70	1.83 <sup>a</sup>	5.36	1.41	3.11	1.49 <sup>a</sup>	3.78	1.59	3.59	1.58 <sup>c</sup>
*Forceful	4.56	1.81	2.87	1.44 <sup>a</sup>	4.13	1.69	2.67	1.43 <sup>a</sup>	3.22	1.45	3.14	1.44
*Have leadership abilities	5.67	1.47	4.15	1.74 <sup>a</sup>	6.00	1.17	3.92	1.51 <sup>a</sup>	3.29	1.55	3.44	1.69
*Willing to take risks	4.93	1.73	2.91	1.53 <sup>a</sup>	5.00	1.46	3.24	1.50 <sup>a</sup>	3.34	1.55	3.67	1.60 <sup>b</sup>
Dominant	3.74	1.48	2.46	1.59 <sup>a</sup>	3.48	1.67	2.27	1.10 <sup>a</sup>	—	—	—	—
*Willing to take a stand	4.75	1.80	3.52	1.75 <sup>a</sup>	4.27	1.57	3.01	1.55 <sup>a</sup>	3.12	1.37	3.44	1.46 <sup>b</sup>
Aggressive	3.44	1.68	2.56	1.60 <sup>a</sup>	3.08	1.52	2.00	1.10 <sup>a</sup>	—	—	—	—
*Self-reliant	4.88	1.51	3.61	1.48 <sup>a</sup>	4.85	1.39	3.67	1.38 <sup>a</sup>	3.98	1.49	4.44	1.61 <sup>b</sup>
*Athletic	5.33	1.37	4.02	1.51 <sup>a</sup>	5.62	1.15	3.62	1.37 <sup>a</sup>	3.32	1.83	4.00	1.88 <sup>b</sup>
*Analytical	4.21	1.68	3.48	1.50 <sup>c</sup>	4.02	1.46	3.09	1.30 <sup>a</sup>	3.32	1.83	4.00	1.88 <sup>b</sup>
*Make decisions easily	5.12	1.47	4.15	1.61 <sup>a</sup>	5.05	1.39	4.12	1.36 <sup>a</sup>	3.59	1.65	3.63	1.63
Self-sufficient	3.63	1.69	2.52	1.36 <sup>a</sup>	3.77	1.59	2.24	1.13 <sup>a</sup>	—	—	—	—
Individualistic	3.40	1.71	2.72	1.60 <sup>c</sup>	3.32	1.44	2.64	1.27 <sup>a</sup>	—	—	—	—
Masculine	5.79	1.51	2.57	1.71 <sup>a</sup>	6.05	1.10	2.45	1.11 <sup>a</sup>	—	—	—	—
*Competitive	5.14	1.44	3.30	1.60 <sup>a</sup>	4.96	1.35	3.09	1.35 <sup>a</sup>	3.97	1.58	4.33	1.66 <sup>b</sup>
*Ambitious	4.77	1.61	2.81	1.88 <sup>a</sup>	4.66	1.51	2.92	1.52 <sup>a</sup>	3.31	1.54	3.98	1.79 <sup>b</sup>
*Act as a leader	5.42	1.39	3.50	1.54 <sup>a</sup>	5.75	1.15	3.52	1.55 <sup>a</sup>	3.03	1.42	3.23	1.58 <sup>c</sup>
Reliable	—	—	—	—	—	—	—	—	3.73	1.30	3.57	1.43
Feminine items												
*Affectionate	5.16	1.15	5.91	1.26 <sup>b</sup>	5.05	1.32	5.94	1.24 <sup>a</sup>	4.85	1.36	4.83	1.45
Sympathetic	4.81	1.43	5.09	1.47	4.19	1.32	4.61	1.57 <sup>c</sup>	—	—	—	—
Sensitive to needs of others	4.75	1.46	4.44	1.74	4.54	1.42	4.43	1.55	—	—	—	—
*Eager to soothe hurt feelings	4.77	1.48	5.37	1.52 <sup>c</sup>	4.48	1.42	5.18	1.50 <sup>a</sup>	4.06	1.15	3.96	1.66
*Tender	4.65	1.55	5.31	1.36 <sup>c</sup>	4.25	1.28	5.25	1.29 <sup>a</sup>	4.18	1.30	4.27	1.41
*Love children	4.95	1.51	6.07	1.11 <sup>a</sup>	4.87	1.39	5.76	1.29 <sup>a</sup>	4.80	1.91	4.42	1.78 <sup>b</sup>
*Gentle	5.26	1.72	6.24	1.21 <sup>a</sup>	5.25	1.42	6.08	1.23 <sup>a</sup>	4.37	1.25	4.69	1.44 <sup>b</sup>
Yielding	2.79	1.13	3.57	1.72 <sup>b</sup>	2.61	1.34	3.38	1.47 <sup>a</sup>	—	—	—	—
*Cheerful	5.00	1.44	5.72	1.43 <sup>b</sup>	4.82	1.41	5.62	1.26 <sup>a</sup>	4.40	1.43	4.21	1.52 <sup>c</sup>
*Soft-spoken	4.16	1.52	5.30	1.56 <sup>a</sup>	3.97	1.40	5.49	1.46 <sup>a</sup>	3.72	1.47	3.12	1.58 <sup>c</sup>
Do not use harsh language	4.05	1.61	4.61	2.11	4.15	1.30	5.42	1.44 <sup>a</sup>	—	—	—	—
Feminine	2.46	1.43	5.61	1.84 <sup>a</sup>	2.00	1.16	5.85	1.40 <sup>a</sup>	—	—	—	—
Conscientious	—	—	—	—	—	—	—	—	4.68	1.16	4.73	1.44
Tactful	—	—	—	—	—	—	—	—	3.75	1.51	3.83	1.47

<sup>a</sup> =  $p < .001$ , <sup>b</sup> =  $p < .01$ , <sup>c</sup> =  $p < .05$ .

the mean scores for 4 masculine items (Dominant, Aggressive, Self-sufficient, and Individualistic) and 1 feminine item (Yielding) did not reach 4 points (somewhat desirable), which indicated that these characteristics were not desirable for either sex. Therefore these items were omitted from the following procedure.

### Factor Analysis

A factor analysis was rendered to examine the BSRI items representing the dimensions of masculinity and femininity. The BSRI items included were those rated by both sexes

as being significantly more socially desirable for one sex than the other and which had a mean of above 4 points (somewhat desirable). Two items (Masculine and Feminine) were omitted from this procedure because previous findings found these items to be too vague and not to be highly correlated with the total scale scores (Bem, 1979, 1981; Pedhazur & Tetenbaum, 1979; Spence, 1993). A total of 22 BSRI items (indicated by an asterisk in Table 1) were factor analyzed. Principal components analysis identified three factors. The 13 original masculine items were highly loaded (i.e.  $>.4$ ) on Factor 1, including one that loaded highly on Factor 3, whereas the 7 original feminine items were highly loaded on Factor 2. Factor 3

**Table 2**

Factor Loadings of 19 BSRI Items Rated Significantly Desirable for Appropriate Sex by Japanese Male and Female Students

Item	Factor 1	Factor 2
Defend my own belief	.73688	-.00507
Independent	.73796	-.05934
Assertive	.84265	-.04265
Strong personality	.75501	-.14940
Forceful	.72558	-.17434
Have leadership ability	.82986	.02858
Willing to take risks	.72676	-.12190
Willing to take a stand	.71123	-.05476
Self-reliant	.68331	-.03067
Competitive	.76997	-.23507
Ambitious	.72346	-.27366
Act as a leader	.81162	-.01904
Affectionate	-.05611	.73053
Eager to soothe hurt feelings	.01631	.76967
Tender	-.04972	.67587
Love children	-.18419	.73228
Gentle	-.09740	.82059
Cheerful	-.08016	.79980
Soft-spoken	-.25848	.69461

had 3 items, including one that highly loaded on Factor 1. Factor 3 was eliminated, as a screen test identified Factors 1 and 2 as meaningful factors (Floyd & Widaman, 1995; Streiner, 1994). The factor analysis on the remaining 19 items identified two factors (see Table 2). All items rated significantly desirable for men were highly loaded on Masculine, whereas the items rated as significantly desirable for women were highly loaded on Feminine. Eigenvalues of Factors 1 and 2 were 7.45 and 3.62, respectively, and these account for 58.3 % of the variance (Streiner, 1994).

### Confirmatory Factor Analysis

Confirmatory factor analysis tested two models: a two-factor model and a one-factor model of the modified BSRI. The data used were collected at two different institutions (a national university and a private college) in Kyusyu. The sample consisted of 215 college students (102 men, 113 women). They were randomly assigned to judge the social desirability of the BSRI items for men or women in Japanese society. A total of 109 students (52 men, 57 women) judged social desirability of the items for men, whereas 106 students (50 men, 56 women) judged the social desirability of the items for women.

Items in each scale were randomly parceled into four summed items for confirmatory factor analysis (West, Finch, & Curran, 1995). Chi-square for a two-factor model was not significant,  $\chi^2$  (19,  $N = 66$ ) = 21.41,  $p < .5$ ; the goodness-of-fit index and adjusted goodness-of-fit index

for the two-factor model were .92 and .86, respectively, which were higher than the recommended range of .90 and .80, respectively (Bentler & Bonett, 1980; Cole, 1987). Chi-square for a one-factor model, on the other hand, was significant,  $\chi^2$  (20,  $N = 61$ ) = 182.60,  $p < .0001$ ; the goodness-of-fit index and adjusted goodness-of-fit index were .57 and .22, respectively. The results indicated that a two-factor model was a better fit for the data.

### Reliability and Mean Scores for Social Desirability Ratings on the Modified BSRI

The modified Japanese Masculine scale (JM) consisted of 12 BSRI items (Defend My Own Beliefs, Independent, Assertive, Strong Personality, Forceful, Have Leadership Abilities, Willing To Take a Risk, Willing To Take a Stand, Self-reliant, Competitive, Ambitious, and Act as a Leader). The modified Japanese Feminine scale (JF) contained 7 BSRI items (Affectionate, Eager To Soothe Hurt Feelings, Tender, Loves Children, Gentle, Cheerful, and Soft-spoken). The mean scores of social desirability for men were 5.03 ( $SD = .98$ ) and 4.95 ( $SD = 1.03$ ) for the JM and JF, respectively, and those for women were 3.40 ( $SD = 1.12$ ) and 5.57 ( $SD = 1.02$ ), respectively. The Masculine score for men was significantly higher than that for women,  $t$  (310) = 13.53,  $p < .001$ , whereas the Femininity score for women was significantly higher than that for men,  $t$  (310) = -5.29,  $p < .001$ . No significant difference between desirable masculine and feminine characteristics was found for men, whereas a significant difference between these traits was found for women,  $t$  (151) = 17.34,  $p < .001$ . The results indicated that socially desirable men have equally high masculine and feminine characteristics, whereas socially desirable women have significantly higher feminine than masculine traits.

Cronbach's alpha for the modified version of the BSRI for social desirability ratings was .76 and .75 for the JM and JF, respectively. The correlation between the two subscales was -.21.

### CONCLUSIONS AND DISCUSSION

The results of this study indicate the importance of a careful revalidation of scales developed in U.S. culture in cross-cultural research. Through a series of paired  $t$ -tests, a preliminary validation of the BSRI in Japan found that the scale was valid overall but needed some modifications to improve validity for measuring gender-related personality traits in Japan (Katsurada & Sugihara, 1999). Further validation using factor analysis and confirmatory factor analysis identified 12 masculine and 7 feminine BSRI items that describe the etic aspect of gender-related personality traits in Japanese society.

Five masculine and almost half of the feminine characteristics were identified as not being socially desirable for the appropriate sex in Japanese culture. The results of this

study were similar to previous cross-cultural findings in which a substantial number of BSRI items were omitted in the test validation process (Lara-Cantú & Navarro-Arias, 1987; Lobel et al., 1997). Examination of the items rated as not being socially desirable by Japanese college students suggests important differences between the two cultures. The characteristics representing individualism (e.g., Dominant, Aggressive, Self-sufficient, Individualistic) were not considered desirable for either men or women in Japanese culture. This finding is similar to the results of a previous study, which found that Chinese men were not "macho" and that independence was not rated as a desirable personality characteristic in Chinese culture (Chia et al., 1994). The authors suggested that the Confucian tradition was one of the responsible factors for this findings: Confucianism emphasized the characteristics of loyalty, integrity, righteousness, and kindness as virtues of men, which were reflected as feminine characteristics in the BSRI. This could explain the fact that Japanese men were expected to possess both masculine and feminine traits, whereas Japanese women were expected to be feminine with low masculine traits.

The concept of collectivism (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988) may also be a possible explanation. Asian cultures in general emphasize and value collectivism, where relationships are formed on the basis of duty and obedience. Interpersonal relationships in collectivist societies are vertical and interdependent in nature. The relationship between parents and children is stronger than the one between spouses. Japanese society is a collectivist societies in which psychological interdependence in families, groups, and organizations is important, and characteristics such as individualism, self-reliance, assertiveness, and independence are not encouraged.

## STUDY 2

Study 2 examined the etic aspect of masculine and feminine personality traits among Japanese college students using the modified version of the Japanese BSRI. It is believed that gender-role stereotypes in a culture shape an individual's gender-role attributes (Bem, 1993). Although there is a wide range of variation in the extent to which people see the traits as desirable and conform to them, social expectations are manifest in an individual's gender identity (Bem, 1976, 1993; Frable, 1989; Harris, 1994). We assumed that this would be the case in Japanese culture. We hypothesized that the mean masculine and feminine scores of men's self-ratings would not be significantly different from each other, with the masculine score being slightly higher than the feminine score, but that the mean masculine score of women's self-ratings would be significantly lower than that of the feminine score. We also assumed that men and women would be significantly different from each other on the JM and JF scales, with men being high on the JM scale and women being higher on the JF scale.

## METHOD

### Sample

A total of 1,230 (531 men, 696 women) from universities and colleges in Japan participated in this part of the study. They came from 12 different colleges and universities, including ten 4-year colleges and universities and two junior colleges; five were national universities, and the rest were private colleges and universities. The students were recruited from various departments and schools, including arts and humanities, education, economics, agriculture, engineering, medicine/dentistry, law, natural science, and marine science. An examination of participants' ages indicated that three of the female students were 44, 45, and 49 years old; because most of the students (99%) ranged in age between 18 and 25 years, these participants were omitted from final data analysis. Altogether 1,227 college students were used for this study. The mean age for male students was 19.7 ( $SD = 1.9$ ), ranging between 18 and 29 years, whereas the mean age for female students was 19.3 ( $SD = 1.4$ ), ranging between 18 and 31 years.

### Measures

The original BSRI was used to collect data for this study, although all of the BSRI items from Study 1 were used to measure the etic aspect of gender-related personality traits in Japanese culture. The scoring procedure, however, was modified to be consistent with the findings in Study 1. The modified JM scale consisted of 12 items (Defend My Own Beliefs, Independent, Assertive, Strong Personality, Forceful, Have Leadership Abilities, Willing To Take Risks, Willing To Take a Stand, Self-reliant, Competitive, Ambitious, and Act as a Leader), and the modified JF scale included 7 items (Affectionate, Eager To Soothe Hurt Feelings, Tender, Loves Children, Gentle, Cheerful, and Soft-spoken). Participants were asked to rate themselves on each item using a 7-point scale, with 7 = always or almost always true and 1 = never or almost never true.

The mean scores for social desirability for the modified JM and JF scales were 5.03 and 4.95 for men and 3.40 and 5.57 for women. Cronbach's alpha was .76 and .75 for the social desirability scores on the JF and JM scale, respectively.

### Procedures

The researchers solicited participation from colleagues in universities and colleges in Japan. The institutions used in Study 2 were different from those used in Study 1, with the exception of one in Kyusyu, where students in a different department were asked to participate. Colleagues in fourteen universities and colleges agreed to collect data. The materials were mailed along with detailed instructions to the instructors, who agreed to distribute and collect the questionnaires in their classes. The questionnaires were

mailed back to the researchers with a return envelope provided by the researchers. Out of 1,251 questionnaires, 21 were either incomplete or obviously answered incorrectly. Thus, 1,230 questionnaires were used for data analysis.

## RESULTS

The results indicated that the means of the JM and JF scales for women were 3.64 ( $SD = 0.95$ ) and 4.34 ( $SD = 0.95$ ), respectively, whereas those for men were 3.89 ( $SD = 0.98$ ) and 4.33 ( $SD = 0.95$ ), respectively. A significant difference between sexes was found on the JM score,  $t(1227) = -4.41, p < .001$ , whereas no significant difference between sexes was found on the JF score. Male students rated themselves on the JM scale significantly higher than the female students did, whereas male students did not differ from female students on the JF scale.

*T*-test analyses showed that Japanese male college students scored significantly higher on 10 items: Defend My Own Beliefs, Independent, Willing To Take Risks, Willing To Take a Stand, Self-reliant, Competitive, Ambitious, and Act as a Leader, as well as Gentle and Soft-spoken (see Table 2). Female students scored significantly higher on 3 items: Loves Children and Cheerful, as well as Strong Personality. Moreover, the mean JF score ( $M = 4.32, SD = .91$ ) was significantly higher than the mean JM score ( $M = 3.86, SD = .95$ ) among men,  $t(531) = 8.12, p < .0001$ . The mean JF score ( $M = 4.31, SD = .90$ ) was significantly higher than the mean JM score ( $M = 3.63, SD = .91$ ) among women,  $t(696) = 14.27, p < .0001$ . Therefore, our assumption was partially confirmed.

An examination of sex types showed that 18% of men were identified as Masculine, 19% as Feminine, 30% as Undifferentiated, and 33% as Androgynous, whereas 19% of women identified themselves as Masculine, 20% as Feminine, 30% as Undifferentiated, and 31% as Androgynous. Distributions of the sex types in both men and women were similar with high rates of the Undifferentiated and Androgynous personalities. The results were consistent with the findings that both sexes scored significantly higher on the JF than the JM scale, and that the differences between the JM and JF scores in both sexes were minimal, although the difference between these scores among females reached significance.

## CONCLUSIONS AND DISCUSSION

Study 2 examined the etic aspect of gender-related personality traits among Japanese college students on the modified BSRI. A comparison between self-rating masculine and feminine scores among men showed that they scored higher on the JF scale than on the JM scale. Japanese men perceived that they have more feminine characteristics than masculine characteristics. This leads to the finding that men and women did not differ from each other on the JF scale, although men scored significantly higher than

women on the JM scale. The results were not consistent with the social desirability ratings, which indicated that Japanese society expects men to have more masculine characteristics than women and women to have more feminine characteristics than men, although women were expected to be more sex-typed than men. Both Japanese men and women have higher feminine characteristics than masculine characteristics.

The results suggest that, although the traditional gender conceptions perpetuated in the society for over 1,000 years still strongly influence societal practice and individuals' thought processes, other factors are contributing to the development of gender identities in Japanese culture.

Developmental processes might lead boys to possess more feminine characteristics than masculine characteristics and girls to possess more masculine characteristics and less feminine characteristics than what society expects. Confucian ethics of being diligent and dedicated were carried into the post-industrial Japanese society. Men form the primary work force and are expected to work outside the home for long hours, whereas women stay at home and take care of the household and children. Consequently mothers and children are left alone without a male figure. Mothers function as caretakers who nurture and as authority figures who discipline children and thus represent a model of women with both feminine and masculine traits. Moreover, as Japanese women also expect men to have both masculine and feminine characteristics (Hofstede, 1996), it is possible that children learn and internalize their mother's mixed expectations toward men.

Strong Confucian ethics also may influence their personality development. Confucian teaching stresses loyalty to the rules, regulations, and all authorities. This could be interpreted as obedience to parents, to teachers in school, and to bosses and companies. Japan is a strong hierarchical society in which relationships are defined as subordinate-superior. This all the more true for men who work at companies. The Japanese workplace expects workers to be loyal and subordinate to the company (Hamada, 1996). In the Japanese corporate environment, managerial style also reflects Japanese cultural values. Japanese companies prefer feminine characteristics to masculine characteristics for managers. Nurturing characteristics such as being kind and gentle, cooperative, friendly, modest, and nonauthoritative are qualifications for an ideal manager, whereas masculine characteristics such as aggressiveness, individuality, directness, and competitiveness are not encouraged. Managers are also expected to be loyal and subservient to the company (Hamada, 1996). All individualistic values such as leadership, creativity, individualism, and independence are valued and emphasized, as long as they do not interfere with social hierarchy. In the process of socialization, men learn their roles as subordinates and internalize them to adopt more feminine characteristics.

On the other hand, women have been free from this socialization process, because a woman's place has been traditionally in the home. Although women are still bound



by Confucian ethics, they have not been as strictly restricted as men have. Opportunities for equal education for men and women have taught the same values to both sexes. Japanese society has emphasized and valued masculine personality traits such as competition, achievement, leadership, and independent (Williams & Best, 1990), and so women have learned and internalized these characteristics.

Japanese society still strongly believes and practices a gendered division of labor in which a man's place is at work and woman's place is at home. Although society has changed to allow more women to work outside the home, this belief, as well as androcentric rules, regulations, and wages, remain obstacles for women to deal with. This fact may have contributed to men having high feminine characteristics for survival in the workplace and women being able to maintain more masculine characteristics.

Another possible explanation lies in the emic aspect of gender-related characteristics of Japanese people. Because this study is limited to the etic aspect of gender-related personality characteristics of Japanese, this is beyond the scope of this article. The personality characteristics other than those we have examined in this study, however, might describe more culture- and gender-specific personality traits, which characterize men and women in Japanese society. Further examination on the emic aspect of Japanese gender-related personality traits is strongly recommended.

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