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What is This?
BODY DISSATISFACTION AND DISORDERED EATING AMONG COLLEGE WOMEN IN CHINA, SOUTH KOREA, AND THE UNITED STATES: CONTRASTING PREDICTIONS FROM SOCIOCULTURAL AND FEMINIST THEORIES

Jaehee Jung
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Body dissatisfaction and disordered eating were compared across groups of college women from China (n = 109), South Korea (n = 137), and the United States (n = 102). Based on cultural differences in the amount of exposure to Western appearance standards, particularly the thin-body ideal, sociocultural theory (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999) would predict that body dissatisfaction and disordered eating would be highest in the U.S. sample and lowest in the Chinese sample. In contrast, based on the speed and pervasiveness of changes in women's roles, feminist theory (Bordo, 1993; Jeffreys, 2005) would predict that body dissatisfaction and disordered eating would be highest in the Korean sample and lowest in the U.S. sample. Multidimensional measures indicated the highest levels of body dissatisfaction and disordered eating in the Korean sample and the lowest levels in the U.S. sample, indicating that predictions derived from feminist theory were a better fit to the data than predictions derived from sociocultural theory. Results indicated that theoretical understandings of body dissatisfaction must recognize not only differences between Western and non-Western cultures, but also differences among non-Western cultures.

Body image, a multidimensional concept that includes thoughts, feelings, and attitudes related to one's own body (Thompson et al., 1999), has been widely studied because a poor body image has been associated with impaired self-esteem, reduced social effectiveness, and potentially life-threatening eating disorders (e.g., Grogan, 1999; Polivy & Herman, 2002). For many years, body dissatisfaction and disordered eating were thought to be culturally limited phenomena that were primarily found among affluent White women in Western societies. However, it is now clear that body dissatisfaction and disordered eating are found in most of the developed and much of the developing world (e.g., Gordon, 2000; Nasser, 1997; Nasser, Katzman, & Gordon, 2001).

Westernization and Western Media
It is not completely understood why body dissatisfaction and disordered eating are so pervasive and far less culturally limited than they were once thought to be. Many authorities attribute the increase in body dissatisfaction in non-Western societies to what Lee (2004) characterized as the “. . . toxin of Westernization” (p. 617). However, Westernization, which is commonly used as both a description and a construct, is extraordinarily complex and multidimensional. It may refer to fashion and popular culture, economic and political structures or values, social roles and expectations of others, or a host of other values, expectations, and worldviews. All, some, or none of these may be related to body dissatisfaction and weight concerns among women. In addition, it is possible that different aspects of Westernization are related to body dissatisfaction in different cultures (e.g., Sheffield, Tse, & Sofronoff, 2005). As a consequence, attributing the spread of body dissatisfaction to this nonspecific process does little to further our understanding of the phenomenon. Although Westernization is of limited utility as an explanatory concept, it is a useful term to describe the complex array of economic, social, and political changes resulting from exposure to Western values and practices. It is in this latter sense that we will use the term.
Most current research on body dissatisfaction and disordered eating is strongly influenced by sociocultural theory (e.g., Thompson et al., 1999). This theory emphasizes the importance of culturally supported and transmitted appearance standards. Drawing on the insights of sociocultural theory, the most extensively studied (and vilified) component of Westernization is Western media, with its ubiquitous portrayals of extremely thin female bodies and its emphasis on diet and weight control (Holmstrom, 2004; Thompson et al., 1999).

The work of Becker, Burwell, Gilman, Herzog, and Hamburg (2002) provides some of the most dramatic evidence of the power of Western media. These authors found that the introduction of Western television to the traditional culture of Fiji was almost immediately followed by increased body dissatisfaction and disordered eating among young women. Although the results of Becker et al. (2002) were compelling and consistent with sociocultural theory and some of the sharpest criticisms of Western media, it is very important to recognize that the relationship between Western media and body dissatisfaction is complex and multiply determined. The work of Anderson-Fye (2004), Becker (2004), and others (e.g., Miller & Pumariega, 2001) has demonstrated that the meaning, significance, and influence of Western media and Western values are strongly influenced by the cultural context in which they appear. The importance of the cultural context is illustrated by the observation that, although both Japan and Taiwan have been heavily exposed to Western media and Western influences and college women in the two countries do not differ in body size, college women in Japan have much greater body dissatisfaction than their cohorts in Taiwan (Shih & Kubo, 2002).

Role of Social Change

It is clear that media influences, particularly the Western obsession with extremely slender female bodies, are important contributors to body dissatisfaction. However, rapid and disruptive social change, political change, the adoption of market economies, and particularly changing roles for women are also important, yet relatively neglected, factors in the sharp increase in body dissatisfaction and disordered eating found in non-Western societies (Forbes, Doroszewicz, Card, & Adams-Curtis, 2004; Gordon, 2000, 2001; Nasser, 1997; Nasser et al., 2001).

The relationship between changing roles for women and the emphasis on unrealistically thin bodies (and other appearance standards) has been extensively discussed by feminist theorists such as Bartky (1990), Bordo (1993), and Brownmiller (1975). Many feminist theorists have proposed that appearance standards are vehicles for the oppression of women (for reviews, see Frederickson & Roberts, 1997; Jeffreys, 2005). From this perspective, any challenge to patriarchy or meaningful step toward gender equality will be countered by increasingly unrealistic appearance standards and increasing pressure to achieve them. The consequence of these standards is an undermining of women’s self-confidence; the dissipation of their emotional, economic, and temporal resources; and a shift in focus from their competencies to superficial aspects of their appearance. As Wolf (1991) observed, “The more legal and material hindrances women have broken through, the more strictly and heavily and cruelly images of female beauty have come to weigh upon us” (p. 10). Viewed from this perspective, it is not surprising that the two decades in the last century with the greatest change in roles for U.S. women, the 1920s and the 1970s, were also the two decades in which the models in U.S. fashion magazines were the most slender and least curvaceous (Silverstein & Perlik, 1995). It is also interesting to note that the first descriptions of what we now call anorexia nervosa were published in Europe in the 1950s, a decade marked by disruptive social changes produced by industrialization and a nascent women’s movement (Nasser, 1997).

If this feminist analysis is correct, in cultures where Westernization has expanded opportunities for women and produced a marked shift toward gender equality, women would be expected to experience increased pressures to conform to unrealistic appearance standards. In turn, these pressures would be expected to result in increased body dissatisfaction and increased symptoms of eating disorders. Studies in the formerly socialist countries of Eastern Europe are consistent with these expectations. With the collapse of the Soviet Union, many of these countries experienced enormous, often tumultuous, social, political, and economic changes in a rush to embrace democracy and a market economy. Some of the most important and dramatic changes occurred in women’s social roles, educational attainments, and economic power (Catina & Joja, 2001; Lee & Caryl, 2005). Consistent with the social change hypothesis derived from feminist theory, research indicates that these changes were almost immediately paralleled by increases in body dissatisfaction and disordered eating (Bilukha & Utermohlen, 2002; Catina & Joja, 2001; Papezova, 2002; Rathner, 2001; Wlodarczyk-Bisaga & Dolan, 1996; Wlodarczyk-Bisage, Dolan, McCluskey, & Lacey, 1995).

East Asian Societies and Body Dissatisfaction

Until recent years, women from East Asian societies (i.e., China, Korea, and Japan) were assumed to be at very low risk for the development of body dissatisfaction, pathological weight concerns, and disordered eating. Examined from the perspectives of both cultural values and body morphology, this assumption seemed quite reasonable. East Asian societies, particularly Korea and China, have long associated slenderness among women with poverty, poor health, and low fecundity (Lee, 1999). Rather than the slender, nearly gaunt, body ideals portrayed in Western media, traditional East Asian body ideals have included round faces and mildly

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plump bodies (Han, 2003). In addition, East Asian beauty standards have placed more emphasis on facial features than on body shape (Lee, 1999). Given these long-established cultural values, it seemed reasonable to believe that East Asian women would be very unlikely to embrace the Western thin-body ideal. In addition, East Asian women tend to have thinner bodies than Western women. This means that it should be easier for them to attain the Western thin-body ideal should they choose to pursue it.

Although the assumption that body dissatisfaction and disordered eating would be uncommon in East Asian societies seems reasonable, the empirical evidence clearly shows that this is not the case (e.g., Gordon, 2001; Lee & Lee, 2000; Nasser, 1997). Rather than having less body and weight dissatisfaction than Western women, there is scattered evidence that some East Asian societies actually have more body and weight dissatisfaction than Western societies (e.g., Wildes, Emery, & Simons, 2001). Some of the most dramatic evidence of greater body dissatisfaction in East Asian women comes from the work of Jung and Forbes (2006). In a comparison of samples of Korean and U.S. college women, they found that the Korean sample scored higher than the U.S. sample on 10 different measures of body dissatisfaction and 1 measure of disordered eating. Although the results of Jung and Forbes (2006) seem surprising, they were consistent with other evidence of a high level of body and weight dissatisfaction among Korean adolescents (Kim & Kim, 2003), young women (Kim & Yoon, 2000; Ryu, Lyle, & McCabe, 2003), and adults (Lee et al., 1998). They are also consistent with reports that South Korea has one of the highest rates of cosmetic surgery in the world (White, 2005).

**Differences Among Asian Societies**

As in the case of the formerly socialist countries of Eastern Europe, the nations of East Asia provide a natural laboratory for the study of Western influences on a wide variety of cultural and psychological variables. Many of these nations share overlapping cultural values and gender-role expectations, yet they differ enormously in their level of exposure to Western media, market economies, and Westernized gender roles and gender expectations. Unfortunately, Western researchers have been slow to examine how Asian societies have differed in their response to the influence of Western values. Western researchers’ limited access to suitable samples and other pragmatic difficulties have certainly contributed to the paucity of comparisons between East Asian countries. In addition, it seems likely that the Western tendency to stereotype Asians as a homogeneous group has also been a factor. Regardless of its origins, the unfortunate practice of treating Asians as a single group has obscured large and very important differences between Asian societies (Oyserman, Coon, & Kemmelmeier, 2002; Yates, Edman, & Arguette, 2004). Below are descriptions of the cultural context of South Korea and China.

**South Korea.** Western influences have been present in South Korea since the Korean Conflict (1950–1953); however, marked Westernization did not occur until the 1980s (Jung, 2003; Shin & Rutkowski, 2003). Between 1980 and 2000, there were enormous changes in the social, economic, and political life of South Korea. A repressive military dictatorship was replaced by a vigorous democracy, and Korea became a major economic and industrial power. These changes resulted in a marked increase in real income and associated improvements in diet, housing, and length of life (Shin & Rutkowski, 2003). Among the factors involved in these changes were greatly increased political, social, and economic power for women and an increasingly visible and effective women’s movement (Jung, 2003). In the mid-1980s, South Korean women's earnings began to rise relative to men’s, and women began to attend college in increasing numbers (Rodgers, 1998). At the present time, 72% of South Korean women attend college, described as the highest rate in the world (Lee & Caryl, 2005).

The changes in women’s roles, opportunities, and privileges have been particularly dramatic because of their sharp contrast with the Confucian philosophy that dominated Korean social, political, and family life for over 500 years (Bell & Chaibong, 2003; Lee, Um, & Kim, 2004). Confucian philosophy emphasizes extremely rigid gender roles, particularly for women. The central and organizing element in these gender roles is women’s subordination and submission to men: Girls are to be submissive to their father, wives are to be submissive to their husband, and widows are to be submissive to their eldest son. As part of these strict gender roles, Confucian tradition limited women’s roles to the home and gave them little power or influence beyond domestic activities (Jung, 2003).

**China.** For centuries the social structure of China, particularly with respect to women’s roles, opportunities, and privileges, was shaped by the same Confucian values that governed Korean society. However, with the establishment of the People’s Republic of China (PRC) in 1949, the Chinese Communist Party (CCP) quickly constructed legal and social mechanisms to promote and protect gender equality in all facets of Chinese life (Hsiung & Wong, 1998; Zheng, 1997, 2005). Commitment to gender equality has always been a core value of the CCP, and the Chinese government points with pride to its accomplishments in this area (Howell, 2003). However, it is often argued that the government’s commitment to gender equality and concerns with women’s roles and privileges diminished during the Cultural Revolution and has been further challenged by the adoption of a modified market economy (Howell, 2003; Zheng, 2005).

China began a program of rapid social and economic change after the implementation of the open-door policy in late 1978 (Chin, 1996). The transformation of Chinese society from a traditional planned economy into a socialist market economy brought enormous change in social roles.
and opportunities, particularly for women (Xi, Sun, & Xiao, 2006). In addition to greater exposure to Western ideals, the socialist market economy also brought exposure to Western advertising. This was a particularly dramatic change because advertising was perceived as a capitalist evil and banned in China after 1949 (Liu, 2002). Exposure to Western advertising and ideas accelerated when Hong Kong was returned to China in 1997.

Political, social, and economic changes in China, particularly in the urban areas that have been most strongly exposed to Western ideals, Western advertising, and market economies, have resulted in a younger generation with less traditional and more Westernized values. This generation is more concerned with financial success, more willing to engage in self-gratification, and more oriented toward brands and brand symbolism (Salzman, 1999).

Exposure to Western influences and increased openness of Chinese society have been so recent that little information is available on how the changes associated with Westernization have influenced body satisfaction among women in China. However, there is a significant literature on body dissatisfaction and disordered eating among Chinese populations in Hong Kong and, to a lesser extent, Taiwan. This literature indicates that increased exposure to Western influences has been associated with increased body dissatisfaction (e.g., Lee & Lee, 2000; Lee, Lee, Leung, & Yu, 1996; Sheffield et al., 2005; Shih & Kubo, 2002). However, Hong Kong reflects a 150-year blending of Chinese and Western cultures that is without parallel in the modern world. Because Hong Kong is politically, economically, and socially unique, it is difficult to determine the extent to which data collected in Hong Kong can be generalized to other areas in China. Similarly, the special social, economic, and political characteristics of Taiwan make it difficult to determine the extent to which data collected in Taiwan can be generalized to other Chinese populations.

The limited available information from China (Lin, 2005; Luo, Parish, & Laumann, 2005; Qian, 2004) indicates that, as would be expected, exposure to Western ideas, Western media, and social change has been associated with increased body dissatisfaction among Chinese women, just as it has among women in Hong Kong, Taiwan, and most other areas of the world. However, no information is available that would allow comparisons among the degree of body dissatisfaction and disordered eating in China, other East Asian societies, and Western societies.

The Present Study

Exposure to Western ideas and practices involves the simultaneous influence of multiple variables. Because the same vector (e.g., Western television) introduces multiple concepts (e.g., body ideals, gender roles, individualism, etc.), isolating the influence of the thin-body ideal, Western gender roles, or any other specific concept is very difficult and often impossible. However, it is sometimes possible to determine which of several alternative hypotheses is the best fit to observed differences between groups. This is the strategy we employed in the present study.

The present study compared a sample of college women from China with the data from the Jung and Forbes study of college women in Korea and the United States. The Chinese sample completed the same multidimensional measures used in the Jung and Forbes study. In addition, the Chinese sample was selected to parallel the demographic characteristics of the two samples reported by Jung and Forbes. As a consequence, both the Chinese and Korean samples were from the capitals of their countries (i.e., Seoul and Beijing), where women have been most exposed to Western practices and values. The Chinese data were collected approximately 12 months after the collection of the Korean and U.S. data.

Predictions From Sociocultural and Feminist Theories

The primary focus of this study is the comparison of two predictions of cultural differences in body dissatisfaction and disordered eating. These predictions will be based on the media influence hypothesis derived from sociocultural theory and the social change hypothesis derived from feminist theory. The media influence hypothesis leads to the prediction that the U.S. sample, which has been relentlessly bombarded with Western media all of their lives, would have the greatest body dissatisfaction and disordered eating, whereas the Chinese sample, which arguably has had the least exposure to these influences, would be expected to have the least body dissatisfaction and disordered eating. In contrast, the social change hypothesis predicts that the U.S. sample, which over the last 20 years has experienced the least social change and the most stable gender roles, would have the lowest level of body dissatisfaction and disordered eating, whereas the Korean sample, which has experienced the greatest change in social roles and opportunities for women, would be expected to have the greatest body dissatisfaction and the highest level of disordered eating.

The secondary focus of the study will be on predictions of cultural differences in awareness and internalization of Western appearance standards. Because of their much greater exposure to Western media, the media influence hypothesis would predict the U.S. sample to be the most aware of Western appearance standards, particularly the thin-body ideal, and have the greatest internalization of these standards. In contrast, the Chinese sample, with the least exposure to Western appearance standards, would be expected to have the least awareness and internalization of these standards. The cultural change hypotheses would predict that Korea, with the greatest social change, would have the greatest awareness and internalization of Western appearance. In contrast, the U.S. sample, with the least social change, would be expected to have the lowest awareness and internalization of these standards.
METHOD

Participants and Procedure

The participants were 345 college women. The Chinese sample was recruited from a central university in Beijing (n = 137; ages 18 to 23 years); the South Korean sample was recruited from universities in Seoul and Kyunggi province (n = 137; ages 18 to 23 years); and the U.S. sample was recruited from a university in the mid-Atlantic region (n = 102; ages 18 to 24 years). All participants were volunteers. Data were collected during regular class periods in undergraduate courses.

The Chinese sample was significantly yet modestly older (M = 20.54, SD = 1.09). In turn, the Korean sample was significantly yet modestly older than the U.S. sample (M = 19.59, SD = 1.28), F(1, 348) = 39.22, p < .001. All of the Korean and Chinese samples were of Korean and Chinese ethnicity, respectively. The self-reported ethnicities of the U.S. sample were: 89 European Americans (87.3%), 6 African Americans (5.9%), 2 Asian Americans (2.0%), 2 Hispanic Americans (2.0%), and 3 self-identified as other.

A self-report questionnaire containing demographic items and instruments assessing participants’ body dissatisfaction, disordered eating, and attitudes toward media images was administered to participants in the language of their locale. The questionnaire was constructed in English and translated into the Chinese and Korean versions by Chinese and Korean bicultural scholars in the United States. Bilingual scholars in China and Korea then back-translated the materials into English. Participants reported their level of agreement on the questionnaire items using a 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree). Data from the body dissatisfaction and disordered eating measures for the Korean and U.S. samples were previously reported by Jung and Forbes (2006).

Measures of Body Dissatisfaction

Body Mass Index. Participants were asked to report height, current weight, and ideal weight, which were used to compute their body mass index (BMI) using the standard formula [weight (kg)/height^2 (m)] and ideal BMI using ideal weight instead of current weight. Based on standards recommended by the National Institute of Health (1998), the participants’ BMI was classified into one of the following categories: underweight, BMI less than 18.5; normal, BMI 18.5 to 24.9; overweight, BMI 25.0 – 29.9; obese, BMI 30.0 and above.

Figure Rating Scale (FRS; Stunkard, Sorenson, & Schulsinger, 1983). The FRS consisted of nine line drawings of female bodies that are consecutively numbered from 1 (very small) to 9 (very large). The participants were asked to select the drawing representing four bodies: (a) their current body, (b) their ideal body, (c) the body preferred by other women, and (d) the body most attractive to men. The discrepancy between the participants’ actual and ideal BMI (actual – ideal BMI) and three discrepancy scores computed from the FRS measures (current body – self ideal body, current body – other women’s ideal, current body – men’s ideal) were used as measures of body dissatisfaction. For example, a positive discrepancy score between the current and ideal body indicated that the participant perceived her actual body as larger than her ideal body.

Body Esteem Scale (BES; Franzoi & Shields, 1984). This measure required participants to indicate their level of positive or negative feelings about 35 specific body parts. The BES has three factor-analytically derived measures for women: Sexual Attractiveness (e.g., body scent, lips), Weight Concerns (e.g., waist, body build), and Physical Condition (e.g., physical stamina, muscular strength). Higher scores on these measures indicate greater body esteem. Reliabilities of the BES were computed by separate coefficient alphas for the three cultural samples. Reliabilities were: Sexual Attractiveness, Korea = .70, China = .81, United States = .75; Weight Concerns, Korea = .78, China = .83, United States = .89; Physical Condition, Korea = .76, China = .74, United States = .88. These values are similar to those reported by Franzoi and Shields (1984).

Body Esteem Scale for Adolescents and Adults (BESAA; Mendelson, Mendelson, & White, 2001). The BESAA consisted of 23 statements reflecting affective evaluations of body-related characteristics and has three factor-analytically derived measures: BESAA-Appearance, BESAA-Weight, and BESAA-Attribution. The BESAA-Appearance scale measured general feelings about appearance. An example item is “I like what I look like in pictures.” The BESAA-Weight measured general feelings about weight. An example item is “I am preoccupied with trying to change my body weight.” The BESS-Attribution measured others’ evaluations about one’s body and appearance. An example item is “People my age like my looks.” Higher scores on these indicated higher levels of body satisfaction. Coefficient alphas for the three cultural samples were: BESAA-Appearance, Korea = .75, China = .83, United States = .90; BESAA-Weight, Korea = .85, China = .88, United States = .93; BESAA-Attribution, Korea = .83, China = .81, United States = .76. These values are similar to those reported by Mendelson et al. (2001).

Measures of Dieting Behavior

The two subscales of the Eating Disorder Inventory (EDI; Garner, Olmsted, & Polivy, 1983), the Drive for Thinness scale (EDI-DT) and the Bulimia scale (EDI-B), were used to assess dieting behaviors (e.g., restrictive tendencies, desire to lose weight) and tendencies to binge and purge, respectively. Sample items of the EDI-DT include “I am
preoccupied with the desire to be thinner” and “I am terrified of gaining weight.” A sample item of the EDI-B includes “I have gone on eating binges where I have felt that I could not stop.” Reliabilities for the EDI-DT and the EDI-B were: EDI-DT, Korea = .86, China = .91, United States = .85; EDI-B, Korea = .82, China = .75, United States = .82. These values are similar to those reported by Garner et al. (1983).

Measures of Attitudes

Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ; Heinberg, Thompson, & Stormer, 1995). The 14-item SATAQ measured awareness (a 6-item Awareness scale) and internalization (an 8-item Internalization scale) of societal attitudes about attractiveness and thinness. Sample items of the Awareness scale include “Attractiveness is very important if you want to get ahead in our culture” and “People think that the thinner you are, the better you look in clothes.” Sample items of the Internalization scale include “I tend to compare my body to people in magazines and on TV” and “I believe that clothes look better on thin models.” Coefficient alphas for Awareness were: Korea = .76, China = .68, United States = .76. Coefficient alphas for Internalization were: Korea = .81, China = .77, United States = .90. The values are similar to those reported by Heinberg et al. (1995).

RESULTS

The self-reported height, weight, desired weight, actual BMI, and ideal BMI of the three samples were compared using analyses of variance followed by pair-wise comparisons using Tukey Honestly Significant Difference (HSD) tests. The results are shown in Table 1. Significant differences were found between samples for the participants’ height, weight, ideal weight, actual BMI, and ideal BMI (p < .05 for all). Pair-wise comparisons revealed that the U.S. sample had greater height, greater weight, greater ideal weight, greater BMI, and greater ideal BMI than the Korean and Chinese samples. The Chinese sample had a larger ideal weight and ideal BMI than the Korean sample. The ideal BMI of the Korean sample fell in the underweight category of the BMI range, whereas the ideal BMI of the other samples fell in the average range.

Because the samples differed on measures of body size, and body dissatisfaction is strongly related to body size (e.g., Grogan, 1999), direct comparisons among the three samples would be seriously confounded. Consequently, all subsequent analyses employed multivariate analyses of covariance (MANCOVA) or univariate analyses of covariance (ANCOVA) with actual BMI as covariate.

Differences between samples were determined for seven families of dependent measures: (a) the actual–ideal BMI discrepancy, (b) the four body ratings from the FRS, (c) discrepancies between the participant’s current body and the three ideal bodies from the FRS, (d) three measures from the BES, (e) three measures from the BESAA, (f) two measures from the EDI, and (g) two measures from the SATAQ.

A MANCOVA revealed a significant effect for country on the dependent variables, F(19, 327) = 13.36, p < .001, partial eta2 = .394. Subsequent separate ANCOVAs found a significant effect for country on each of the seven families of dependent variables (p < .001 for all). Tukey HSD tests were used for all post hoc pair-wise comparisons between the groups. The means, standard deviations, and results of the univariate ANCOVAs are shown in Table 2. Table 2 also contains unadjusted values (reported in parentheses) for each of the variables to show how the results were affected by group differences in body size. Because of the confounding effect of sample differences in BMI, the unadjusted values should not be used to compare samples.

Actual–Ideal BMI Discrepancy

The ANCOVA on the measure of body dissatisfaction based on the discrepancy between the actual and ideal BMI was significant, F(1, 345) = 21.65, p < .001, partial eta2 = .112. As shown in Table 2, Tukey HSD tests indicated that the Korean sample had a larger discrepancy than the Chinese sample and the Chinese sample had a larger discrepancy

Table 1

Height, Weight, Ideal Weight, BMI, and Ideal BMI for the Korean, Chinese, and U.S. Samples

<table>
<thead>
<tr>
<th>Measures</th>
<th>Korea (N = 137)</th>
<th>China (N = 109)</th>
<th>United States (N = 102)</th>
<th>F1</th>
<th>Partial Etas2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (cm)</td>
<td>162.96a</td>
<td>163.39a</td>
<td>165.29</td>
<td>5.35**</td>
<td>.030</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>51.80a</td>
<td>53.56a</td>
<td>59.48</td>
<td>29.79*</td>
<td>.146</td>
</tr>
<tr>
<td>Ideal weight (kg)</td>
<td>47.59</td>
<td>50.69a</td>
<td>54.90</td>
<td>41.26*</td>
<td>.192</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>19.49a</td>
<td>20.18</td>
<td>21.77</td>
<td>23.87*</td>
<td>.121</td>
</tr>
<tr>
<td>Ideal BMI (kg/m²)</td>
<td>17.93</td>
<td>18.61a</td>
<td>20.18</td>
<td>47.10*</td>
<td>.213</td>
</tr>
</tbody>
</table>

Note. Means with the same subscript were not significantly different from each other. BMI = Body Mass Index. *ANOVA df = (1, 346).

*p < .05. **p < .01.
than the U.S. sample. These results were consistent with the predictions based on the social change hypothesis.

**FRS Body Measures**

Separate ANCOVAs were computed for each of the four FRS body measures. As shown in Table 2, results for the figures representing the participant’s current body, self ideal body, other women’s ideal body, and men’s ideal body were all significant. Although no specific predictions were made for the four FRS body measures, it is interesting to note that the Chinese sample, as compared with the U.S. and Korean samples, chose larger figures to represent the body preferred by other women and by men.

### Table 2

<table>
<thead>
<tr>
<th>Measures</th>
<th>Korea</th>
<th>China</th>
<th>United States</th>
<th>F†</th>
<th>Partial Eta²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual-ideal BMI</td>
<td>1.91 (.99)</td>
<td>1.45 (1.09)</td>
<td>.88 (1.18)</td>
<td>21.65***</td>
<td>.112</td>
</tr>
<tr>
<td>FRS bodies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current body</td>
<td>3.60 (.62)</td>
<td>3.62 (.68)</td>
<td>3.00 (.73)</td>
<td>23.83***</td>
<td>.122</td>
</tr>
<tr>
<td>Self ideal body</td>
<td>2.41 (.53)</td>
<td>2.80 (.58)</td>
<td>2.38 (.63)</td>
<td>15.72***</td>
<td>.084</td>
</tr>
<tr>
<td>Other women’s ideal body</td>
<td>2.02 (.56)</td>
<td>2.38 (.62)</td>
<td>2.39 (.67)</td>
<td>11.94***</td>
<td>.065</td>
</tr>
<tr>
<td>Men’s ideal body</td>
<td>2.30 (.64)</td>
<td>2.95 (.71)</td>
<td>2.55 (.77)</td>
<td>23.06***</td>
<td>.118</td>
</tr>
<tr>
<td>FRS body discrepancies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current—Self ideal</td>
<td>1.19 (.70)</td>
<td>.83 (.77)</td>
<td>.62 (.83)</td>
<td>14.11***</td>
<td>.076</td>
</tr>
<tr>
<td>Current—Other women’s ideal</td>
<td>1.58 (.74)</td>
<td>1.25 (.82)</td>
<td>.61 (.89)</td>
<td>32.84***</td>
<td>.160</td>
</tr>
<tr>
<td>Current—Men’s ideal</td>
<td>1.29 (.83)</td>
<td>.68 (.92)</td>
<td>.45 (.99)</td>
<td>23.50***</td>
<td>.120</td>
</tr>
<tr>
<td>BES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual attractiveness</td>
<td>40.10 (5.12)</td>
<td>43.66 (5.66)</td>
<td>47.60 (6.10)</td>
<td>42.28***</td>
<td>.197</td>
</tr>
<tr>
<td>Weight concerns</td>
<td>27.93 (5.32)</td>
<td>30.65 (5.88)</td>
<td>32.31 (.34)</td>
<td>14.02***</td>
<td>.075</td>
</tr>
<tr>
<td>Physical condition</td>
<td>27.20 (4.53)</td>
<td>30.21 (5.00)</td>
<td>31.94 (5.40)</td>
<td>23.20***</td>
<td>.119</td>
</tr>
<tr>
<td>BESAA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>30.00 (5.28)</td>
<td>33.25 (5.83)</td>
<td>33.29 (.30)</td>
<td>11.31***</td>
<td>.060</td>
</tr>
<tr>
<td>Attribution</td>
<td>13.96 (3.06)</td>
<td>14.36 (3.35)</td>
<td>17.91 (3.64)</td>
<td>36.84***</td>
<td>.176</td>
</tr>
<tr>
<td>Weight</td>
<td>21.22 (5.12)</td>
<td>24.46 (5.66)</td>
<td>26.16 (6.11)</td>
<td>19.91***</td>
<td>.104</td>
</tr>
<tr>
<td>EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive for thinness</td>
<td>22.70 (5.60)</td>
<td>21.64 (6.18)</td>
<td>21.58 (6.67)</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td>Bulimia</td>
<td>18.60 (4.44)</td>
<td>19.80 (4.91)</td>
<td>15.16 (5.30)</td>
<td>21.18***</td>
<td>.110</td>
</tr>
<tr>
<td>Sataq</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awareness</td>
<td>23.82 (2.78)</td>
<td>20.23 (3.07)</td>
<td>22.03 (3.31)</td>
<td>38.31***</td>
<td>.182</td>
</tr>
<tr>
<td>Internalization</td>
<td>26.86 (5.10)</td>
<td>24.80 (5.64)</td>
<td>27.15 (.68)</td>
<td>5.16**</td>
<td>.029</td>
</tr>
</tbody>
</table>

*Note. Means with the same subscript were not significantly different when Body Mass Index (BMI) was controlled. Body 1-2 = current body – ideal body; Body 1-3 = current body – cultural ideal body; Body 1-4 = current body – attractive body to men. BES = Body Esteem Scale (Franzoi & Shields, 1984); BESAA = Body Esteem Scale for Adolescents and Adults (Mendelson et al., 2001); Sataq = Sociocultural Attitudes toward Appearance Questionnaire (Heinberg et al., 1995); EDI = Eating Disorder Inventory (Garner et al., 1983). 1Analysis of Covariance (ANCOVA) df = (1, 346). *p < .05. **p < .01. ***p < .001.
**FRS Discrepancy Measures**

The FRS measures of greatest interest were the discrepancies between the figure chosen to represent the participant’s actual body and the figures representing the three ideals (self, other women’s, and men’s). As shown in Table 2, the ANCOVAs for current–self ideal, current–other women’s ideal, and current–men’s ideal were all significant. On each of the FRS discrepancy-based measures, the Korean sample had significantly greater body dissatisfaction than the Chinese and U.S. samples. The Chinese sample had greater body dissatisfaction than the U.S. sample on all three discrepancy measures; however, this difference was significant only for the difference between the participant's current body and other women's ideal body. These results were consistent with the predictions based on the social change hypothesis.

**BES Measures**

As shown in Table 2, the ANCOVAs for the BES Sexual Attractiveness, Weight Concerns, and Physical Condition measures were all significant. On each of the BES measures of body satisfaction (esteem), the Korean sample had significantly less body satisfaction, or greater body dissatisfaction, than the Chinese or U.S. samples, and the Chinese sample had greater body dissatisfaction than the U.S. sample on two of the three measures. These results were consistent with the predictions based on the social change hypothesis.

**BESAA Measures**

As shown in Table 2, the ANCOVAs for the BESAA Appearance, Attribution, and Weight measures were all significant. On all three measures, the Korean sample had less body satisfaction than the U.S. sample, and on two of the three measures, the Korean sample had greater body dissatisfaction than the Chinese sample. The Chinese sample had greater body dissatisfaction than the U.S. sample on two of the three measures. These results were consistent with the predictions based on the social change hypothesis.

**EDI Measures**

As shown in Table 2, the ANCOVA for the EDI Drive for Thinness scale was not significant, indicating no differences between the countries in the pursuit of thinness. This result was inconsistent with both sets of predictions. However, the ANCOVA for the EDI Bulimia scale was significant. This result indicated that the Korean and Chinese samples did not differ, yet both samples had more behaviors associated with disordered eating than the U.S. sample. The results for the EDI Bulimia scale were consistent with predictions based on the social change hypothesis.

**SATAQ Measures**

As shown in Table 2, the ANCOVAs for the SATAQ Awareness and Internalization scales were both significant. The results for the Awareness Scale indicated that, as predicted by the media influence hypothesis, the U.S. sample had greater awareness of Western appearance standards than the Chinese sample. However, as predicted by the social change hypothesis, the Korean sample had greater awareness of Western appearance standards than either the U.S. or Chinese samples. The results for the Internalization scale indicated that, as predicted by the media influence hypothesis, the Chinese sample had less internalization of Western appearance standards than either the Korean or U.S. samples. However, the predicted difference between the Korean and U.S. samples was not found.

**DISCUSSION**

Our previous study found greater body dissatisfaction in a Korean sample than in a U.S. sample (Jung & Forbes, 2006). We hypothesized that this finding was the result of the speed and extent of recent social changes in Korea, particularly changes in roles for women; however, in that study we did not formally compare predictions based on the media influence hypothesis with predictions based on the social change hypothesis. The present study extended our findings to include China and allowed us to contrast predictions of cultural differences in body dissatisfaction and disordered eating based on hypotheses derived from sociocultural and feminist theories. Because the three groups differed in body size, all comparisons between groups were made with ANCOVAs using BMI as a covariate. Consequently, the differences we reported are not the result of cultural differences in actual body size.

**Ideal Body Sizes**

We made no specific predictions about differences in the body size participants preferred for themselves and perceived as preferred by men. However, the finding that the Chinese sample chose larger figures to represent these standards than did the Korean or U.S. samples is consistent with traditional Chinese preferences for round faces and mildly plump female bodies (e.g., Han, 2003). Although Korea is often described as sharing this traditional preference for larger female bodies (Han, 2003; Lippincott & Hwang, 1999), the Korean sample selected the smallest figures as representing the body size desired by other women and by men. In addition, the ideal body size of the Korean sample (BMI = 17.93) fell in the range that the U.S. National Institute of Health (1998) classifies as underweight. Assuming that reports of a traditional Korean preference for plump female bodies are correct, our results suggest that this preference has been replaced, at least among the young women in our sample, by a preference for very thin bodies. The results of Kim and Kim (2001, 2003) indicated this preference...
appears in early adolescence and is not limited to college women.

**Body Dissatisfaction**

The media influence hypothesis, derived from sociocultural theory, predicted that the greatest body dissatisfaction would be found in the U.S. sample, the group with the greatest exposure to Western beauty standards. Conversely, the least body dissatisfaction would be found in the Chinese sample, the group with arguably the least exposure to Western beauty standards. In contrast, the social change hypothesis, derived from feminist theory, predicted the greatest body dissatisfaction in the Korean sample, the group with the greatest social changes, and the least body dissatisfaction in the U.S. sample, the group with the least social change. Predictions from the social change hypothesis were a better fit to the data than predictions based on the media influence hypothesis for the four self-ideal discrepancy measures of body dissatisfaction, the three measures of body dissatisfaction from the BES, and the three measures of body dissatisfaction from the BESAA.

Although it appears more parsimonious to view our results from the perspective of feminist theory than from the perspective of sociocultural theory, it is important to note that our results are not necessarily inconsistent with sociocultural theory. It is possible that, because of its lifelong saturation with Western media, the U.S. sample either became habituated to media influences or developed effective strategies to minimize their effect. In contrast, as a relatively novel stimulus associated with social prestige, Western media may have been more potent in Korea and China. Although the habituated/effective coping strategies versus novel stimulus hypothesis seems plausible, it appears to be inconsistent with a large body of evidence demonstrating a robust relationship between media exposure and body dissatisfaction in Western populations (e.g., Harrison, 2003; Harrison & Cantor, 1997; Silverstein, Peterson, & Perdue, 1986; Thompson et al., 1999).

We have contrasted predictions derived from sociocultural and feminist theories, yet we do not view these theories as incompatible. Much to the contrary, we find that the insights of one theoretical system often augment the insights of the other (Forbes, Jobe, & Revak, 2006; Frederick & Forbes, 2007). In fact, our study is a good illustration of this process. If, as feminist theory suggests, the role of the unrealistic appearance standards described by sociocultural theory is to divert women’s attention, resources, and competencies from the pursuit of gender equality, the more the forces of Westernization challenge traditional gender roles, the more a culture should emphasize unrealistic appearance standards. That is, sociocultural theory has identified Western media and appearance standards as the mechanisms involved in the relationship between Westernization and body dissatisfaction, whereas feminist theory provides an explanation of the purpose served by these mechanisms and why the relationship between Westernization and body dissatisfaction is so strong.

Given the widespread and often sharp criticism of the practice of applying the concepts of Western feminism to non-Western cultures (e.g., Mohanty, Russo, & Torres, 1991), the extent to which predictions based on the feminist theory fit the experience of body dissatisfaction and behaviors associated with disordered eating in our Korean and Chinese samples may seem surprising. However, as Jeffrey (2005) and many others have argued, beauty practices may differ across cultures, yet the social/political purpose of beauty practices, the oppression of women and the maintenance of patriarchal control, are constants found across many different cultures and appearance standards. According to this view, traditional Chinese foot binding, the forced feeding of girls in some African societies, and the Western thin-body ideal are all means of achieving the same goal: the oppression of women. Viewed from this perspective, the feminist theory that generated our hypotheses is a reflection of a broad, cross-cultural feminist perspective that transcends the social, economic, religious, or political structures that may isolate or fragment more culture-specific feminist theories.

**Awareness and Internalization of Appearance Standards**

The media-influence hypothesis predicted that awareness and internalization of Western appearance standards would be highest in the U.S. sample and lowest in the Chinese samples. This predicted result was found for the SATAQ Internalization scale. However, contrary to the predictions of the media influence hypothesis, yet consistent with the predictions of the social change hypothesis, the Korean sample scored significantly higher on the SATAQ Awareness scale than either the U.S. or the Chinese sample. Although the habituated/effective coping strategies versus novel stimulus hypothesis would predict the difference in awareness between the Korean and U.S. samples, it would not predict the difference between the Chinese and U.S. samples. In the final analysis, none of the hypotheses correctly predicted the results for awareness of Western appearance standards. Future studies of cultural differences in the awareness and internalization of Western appearance standards are indicated.

**Measures of Disordered Eating**

Our previous study found no difference between the Korean and U.S. samples on the EDI-DT scale. The present study extends this finding to include the Chinese sample. The failure to find differences between the Chinese and U.S. samples, like the parallel lack of a difference between the Korean and U.S. samples, are consistent with Keel and Klump’s (2003) suggestion that the drive for thinness may be limited to cultures that have historically idealized thin bodies.
Scores on the EDI-B scale indicated that the Chinese and Korean samples had more behaviors associated with disordered eating than the U.S. sample. This finding is consistent with the predictions from the social change hypothesis and the finding of greater body dissatisfaction in the Chinese and Korean samples than in the U.S. sample. The result for the Chinese sample is particularly interesting because this sample had the lowest awareness and internalization of Western appearance standards. Because increased internalization of Western appearance standards is associated with increased symptoms of eating disorders (Calogero, Davis, & Thompson, 2004; Cashel, Cunningham, Landeros, Cokley, & Muhammad, 2003; Rukavina & Pokrajac-Buljan, 2006), this suggests that relationships between the internalization of Western appearance standards and behaviors associated with disordered eating are complex and may have different moderators in China (and Korea) than in the United States. Like our previous results, these findings emphasize the importance of identifying the cultural factors that moderate exposure to Western appearance ideals and practices.

**Limitations**

Our results reflect associations between complex social changes and body dissatisfaction. They do not demonstrate causal relationships. In addition, we inferred, yet did not directly measure, the extent of exposure to Western media or the degree of social change in our samples. Although there seems to be little reason to doubt the accuracy of our inferences about cultural differences in media exposure, future studies should directly measure this variable. It would be even more important to directly measure gender-role change; however, satisfactory cross-cultural measures of this variable are not available. The lack of reliable and valid cross-cultural measures of gender-role change is a serious problem that restricts cross-cultural research.  

As for almost all cross-cultural studies of body dissatisfaction, our study is limited by small samples of college students. In addition, the samples from Korea and China were from the capital cities of their countries. As such, they were probably exposed to more Western influences than many of their cohorts. This means it is very unlikely that our samples were representative of college students in their respective countries, and they are certainly not representative of their countries as a whole. Consequently, our results should be generalized with appropriate caution. On the other hand, our samples were drawn from populations that were among the first segments of their societies to experience Western influences. This suggests that, as social changes associated with Westernization continue, the results found in our samples may also be found in other segments of Chinese and Korean societies.

In addition, as with almost all cross-cultural studies of body dissatisfaction, we used measures that were developed in Western cultures and translated from their original English. Our translations were carefully done by experienced bilingual and bicultural scholars, and the reliabilities of the translated measures were very similar to the reliabilities of the original English version. These findings suggest that the translations were of high quality. However, as is almost always the case, we had no way to determine the extent to which the translations reflected the constructs intended by their authors or if the constructs were the same in the three different cultures. Regardless of how well they are done, translations are always potentially problematic and should be interpreted with appropriate care (King, 1993).

Our emphasis on media influences, appearance standards, and social change is not intended to imply that these are the only mechanisms involved in body dissatisfaction and disordered eating. Body dissatisfaction and disordered eating are extremely complex phenomena with multiple determinants, moderators, and manifestations (for a review, see Keel, 2005). Although we measured more variables than most studies of body dissatisfaction, our measures of disordered eating were sparse and limited, and we failed to include any measures of biological factors. It is important that future research employ more comprehensive measures of disordered eating and consider the possible interactions between sociocultural variables (e.g., Keel & Klump, 2003) and genetic vulnerabilities (e.g., Kaye et al., 2004).

**Conclusion**

Although there have been a few comparisons of the relative contribution of factors based on sociocultural and feminist theories to body dissatisfaction or disordered eating in Western women and men (Forbes et al., 2006; Frederick & Forbes, 2007), to our knowledge, this is the first study comparing predictions derived from sociocultural and feminist theories in cross-cultural comparisons of body dissatisfaction and disordered eating. In addition, it appears to be the only available comparison of body dissatisfaction in Chinese and Korean college women. Despite its limitations, the study had two important findings. First, among the samples we studied, predictions derived from feminist theory were a better fit to the data than were predictions derived from sociocultural theory. Second, the results for the Chinese and Korean samples indicated that cultural differences in body dissatisfaction and disordered eating exist even among cultures in geographic proximity, with many centuries of contact, and with many shared values. Demonstration of these differences in East Asian cultures is particularly important because Western stereotypes have often obscured differences among these cultures.

**NOTES**

1. Although the vast majority of Western and East Asian authors agree with this description of traditional East Asian beauty...
standards, this agreement is not universal. For an alternative view, see Leung, Lam, and Sze (2001).

2. A discussion of the history and success of CCP and PRC policies on women's rights is beyond the scope of this article. For the official government view, see State Council (1994). For alternative views, see Amnesty International (1995) and Human Rights in China (1995).

3. Ages reported by the Chinese and Korean samples, where infants are considered to be 1 year of age at birth, were converted to the Western convention by subtracting 1 year from the age reported by the participants.

4. The Gender Empowerment Measure developed by the United Nations Development Program is a very promising tool. Unfortunately, the measure has only been available since 1990 and data from many nations, including China, are not available. Information on this measure is available from http://hdr.undp.org/hdr.

REFERENCES


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