

When Ideals Are Too “Far Off”: Physical Self-Ideal Discrepancy and Body Dissatisfaction in Japan

ROTEM KOWNER

*Department of East Asia Studies
The University of Haifa, Israel*

ABSTRACT. There is much evidence that young Japanese adults manifest relatively low body esteem—a phenomenon often explained as an outcome of modesty or limited need for self-enhancement. The author sought to identify additional determinants of this phenomenon and to explain its sources by examining the relationship between several presumed factors and level of body satisfaction rated by 263 Japanese students. The findings confirm earlier evidence of low body satisfaction among young Japanese adults and indicate that it is predicted mainly by a discrepancy between perceptions of the actual body and the ideal, self-esteem, and a predisposition to interpersonal phobia. Although some of the factors revealed are relevant to other cultures as well, the relatively wide discrepancy between self and ideal body and predisposition to interpersonal phobia may characterize young Japanese adults in particular and stem from a specific historical background. Overall, the results suggest that culture has a significant role in shaping collective body images in Japan and that a broader conceptualization of physical self-ideal discrepancy may better explain divergent levels of body satisfaction across cultures.

Key words: body esteem, body ideal, body satisfaction, cross-cultural psychology, interpersonal phobia, Japanese personality, self-enhancement, self-esteem, physical self-ideal discrepancy, *taijin kyōfushō*

THE DETERMINANTS OF BODY ESTEEM have been somewhat overlooked despite the attention researchers have devoted to the relations between body image and eating disorders as well as the effect of physical stereotyping on the self (cf. Grogan, 1999). At the same time, many of them share a consensus that

The author thanks Haruhiko Shobo for his major assistance in conducting the empirical part of this project, and Toshiki Ogawa, Harumi Befu, Charles Greenbaum, and Esther Rothblum for their useful comments.

Address correspondence to Rotem Kowner, Department of East Asian Studies, The University of Haifa, Israel 31905; kowner@research.haifa.ac.il (e-mail).

body image, and body esteem in particular, is socially determined and that its development is based on interactions with one's surroundings (e.g., Fisher, 1986; Cash & Pruzinsky, 1990). Whereas early age caretakers' reaction to and feelings about children's physical attributes seem greatly to affect the children's body image, in later years social standards of appearance take their toll. Yet, what is the mechanism that makes external standards affect our body perceptions?

A large number of studies have indicated that, despite the existence of general and probably universal guidelines of beauty and ugliness, judgments of physical attractiveness barely fluctuate with age, gender, culture, and available information but fluctuate mainly with the context and, especially, the social context (for reviews, see, e.g., Kownar & Ogawa, 1993, 1995; Langlois, Kalakanis, Rubenstein, Larson, & Hallam, 2000). Because physical appearance is a salient feature, people conduct a habitual process in their daily lives that Kownar (1995) labeled *physical attractiveness comparison*. The repetitive nature of this form of social comparison explains the limited repercussions a single comparison has on the self (Kownar, 1996a). Nevertheless, the process of comparison seems to have an accumulated effect, and people tend to create a stable image of an ideal body with which they compare their perceptions of their own body.

As an evaluative attribute, body image, and specifically its derivative *body satisfaction*, stems from a comparison of the self with two sources of ideal images. One source is individual unique preferences and ideals—the outcome of individuals' personalities. The other source is collective ideals, namely the preferences shared by individuals' reference groups as a whole. Because these personal and collective ideals cannot be easily distinguished apart, we will treat them as a single construal, namely one's *body ideal*. A comparison between individuals' perceived bodies and their body ideals ought to result in discrepancy. Yet, what is the effect of this discrepancy on people's body images and body satisfaction?

Self-Discrepancy Theory and the Body

Higgins (1987, 1989) conceived the *self-discrepancy theory* to account for the gap in perceptions between the actual and ideal self of individuals. The theory postulates three domains of self: *actual self*, *ideal self*, and *ought self*. The actual self represents the attributes that individuals or significant others believe individuals possess, whereas the ideal self and ought self represent the attributes that individuals or significant others ideally wish or feels obliged to possess. The latter concepts serve as self-evaluative standards and are called *self-guides*. Discrepancy between the actual self and the self-guides, Higgins maintains, results in a negative emotional–motivational state. Hence, in the case of the body, one may assume that the wider the discrepancy between individuals' bodily perceptions and particular bodily ideals is, the lower their body images and body satisfaction will be.

Borrowing from Higgins' (1987, 1989) terminology, one might also contend that both at the individual and the group level the effect of acquisition of

external values on body image depends primarily on the distance between the actual or perceived physical characteristics of the borrower and the ideal image acquired (physical self-ideal discrepancy). This is because physical characteristics may provide “a source of their own body-image and psychosocial development by either matching or not matching the physicalistic stereotypes of their social context” (Lerner & Jovanovic, 1990, p. 120). Thus, the farther the shift in ideals of physical attractiveness from the prevailing physical characteristics of an individual or a group, the number of people who feel physically adequate and are able to come within reach of those ideals becomes fewer, and the number of those who experience low body esteem and body dissatisfaction becomes greater.

Higgins, Klein, and Strauman (1985) lent support to the above assumption by demonstrating that bodily discrepancies between the perceived self and the ideal self do predict dissatisfaction with the self. Subsequent researchers have examined this notion for measures of body shape and found self-ideal discrepancy to be correlated negatively with appearance evaluation and positively with body part dissatisfaction, especially in women (Keeton, Cash, & Brown, 1990; Silberstein, Striegel-Moore, Timko, & Rodin, 1988; Strauman, Vookles, Berenstein, Chaiken, & Higgins, 1991). Moreover, Williamson, Gleaves, Watkins, and Schlundt (1993) found that discrepancy between perceived and ideal body size correlated more highly with measures of body dissatisfaction than did measures of current body size perception, ideal body size, body size estimation accuracy, or indexes based on actual body size.

The main constraint of the aforementioned studies is the focus on women's body dissatisfaction in general and body size and shape in particular. One exception is Jacobi and Cash's (1994) study, which extended the framework of self-ideal discrepancy to other physical attributes and examined the theory with men as well. Jacobi and Cash measured self-ideal discrepancies in a greater variety of body parts and found high negative correlations between discrepancies in body size, weight, muscularity, and height and global body image scores for both men and women. Although the approach of Jacobi and Cash is relevant mainly for a young White American population, their framework appears to provide much insight for the Japanese population as well, especially because of their long history of emulating models of foreign culture and eventually Western body ideals.

Culture and Body Image: The Japanese Case

Whereas many aspects of the body ideal professed by Japanese young adults are universal (i.e., Daibo, 1988, 1991), the presence of Western and Caucasian body ideals in Japanese daily life is widely documented as well. These ideals are evident in the frequent use of Caucasian models and Western status symbols in the Japanese media (Kitahara, 1989) and the look desired in aesthetic surgery (Shirakabe, 1991). These ideals can also be discerned in popular surveys and in-

interviews conducted in Japan regarding the preferred look (e.g., Kelsky, 2001; Kuwabara, 1983) and even in the depiction of Japanese comic figures (Ito, 1994). All these sources attest that the physical appearance idealized in the West has many followers in Japan, although it is apparent that this appearance is relatively different from the typical Japanese appearance. For this reason, young adults in present-day Japan may serve as an instructive case study regarding the association between physical self-ideal discrepancy and body dissatisfaction.

There is considerable empirical evidence for the relatively low body image and high level of body dissatisfaction in Japan. A number of studies found that Japanese adolescents and young adults had lower evaluations of their body image and expressed lower estimation of their physical ability and physical confidence than did their American peers (Cusumano, Robinson, & Morooka, 1989; Lerner, Iwawaki, Chihara, & Sorell, 1980). In another detailed Japanese–American comparison, Demick, Ishii, and Inoue (1997) found their Japanese respondents to be less satisfied with their bodies than were their American counterparts. In a recent study, Kowner (2002a) compared the self-ratings of a large sample of Japanese students on the Body Esteem Scale (BES; Franzoi & Shields, 1984) with ratings of several other cultural groups obtained earlier on the same scale. The findings corroborated earlier studies, as scores for both Japanese men and women were lower than were scores for similar samples of Americans (White, Black, and mixed-race samples), Chinese (in Hong Kong or residing in the United States), Iranians, and Israelis.

Although the results of these studies indicated the existence of lower body image in the Japanese population, the researchers did not explicitly point out the sources of this lower body image. Some of the researchers, however, speculated whether those low scores genuinely reflected body image lower than that in similar groups in other cultures, or a cultural response style characteristic of the Japanese, who supposedly “leave a gap between what they express and what they really think” (Cusumano et al., 1989, p. 914). Lincoln (1989), in fact, contended that whenever an American questionnaire of any self-descriptive measure is used in Japan, respondents tend to make lower scores than Americans because of the cultural norm of humble presentation of self typical of collective societies. There has been a considerable debate as to whether Japanese feign modesty in their questionnaire responses (Heine, Lehman, Markus, & Kitayama, 1999; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Kurman, 2003). Heine and Lehman (1995), however, demonstrated that comparisons between Japanese and North Americans on anonymous questionnaires, at least for students, are not confounded by socially desirable response sets. In respect to the body, Demick, et al. (1997) suggested that the seemingly less favorable Japanese view of their body is simply the result of being “less concerned (rather than more distressed) than Americans with the appearance of their bodies (p. 94).” They substantiated this hypothesis with findings that the Japanese use lesser degrees of personal space and have a more outer (connectedness) than inner (individuality) orientation.

Cusumano et al. (1989), however, hypothesized that the lower scores of Japanese in the bodily domain are the result of the Japanese concept of *taijin kyô-fushô* (i.e., sensitivity to what others think of one's physical appearance), which may explain "the depressed scores of Japanese subjects" (p. 914). Kowner (2002a) suggested additional causes to account for the cross-cultural findings. First, he argued that the positive correlations found between body esteem and self-esteem and body consciousness on the one hand and negative correlation between body esteem and social anxiety on the other hand may indicate the role of the self in general, and these constructs in particular, in determining level of body esteem in Japan. In other words, the lower body esteem among Japanese stems in part from lower self-esteem and related constructs. Nonetheless, Kowner also hypothesized that Japanese body esteem may concern broader cultural and historical perspectives, related to adoption of bodily ideals from other cultures.

In the present study, I sought to investigate the plausibility of these accounts, focusing on the notion of self-ideal discrepancy, as well as a predisposition to interpersonal phobia, low self-esteem, and a tendency toward a collective view of self.

Additional Determinants of Body Dissatisfaction Among Young Japanese Adults

Although physical self-ideal discrepancy may be an important determinant of Japanese body dissatisfaction, it is certainly not the only one. In the following sections, I discuss several additional factors that presumably affect body dissatisfaction in Japan.

Individualism–Collectivism

In the past 2 decades, the continuum of individualism–collectivism has become a central dimension of supposed cultural and individual variability. Whereas individualistic cultures favor individual goals over group goals, collectivistic cultures prefer group goals (Hofstede, 1980; Triandis, 1995). Using somewhat different terms, Markus and Kitayama (1991) rendered this paradigm into a so-called *independence–interdependence dichotomy* and examined its effect on the self. They suggested that in interdependent societies, of which Japan serves as a prime example, others are used for self-definition rather than for self-evaluation, as in independent societies (e.g., the United States). As such, the basis of self-esteem in interdependent societies is the ability to adjust and restrain the self rather than to express it and validate internal attributes.

This dichotomy seems to have far-reaching repercussions on the way the body is perceived in different cultures. People in independent societies not only use their body to compare themselves with others and to enhance their self-esteem, they also view it less critically because the majority of them believe that they are more at-

tractive than the average (on this tendency toward self-enhancement, see Wylie, 1979). In contrast, in collective societies, such as Japan, people are not only less prone to compare themselves with others on internal attributes such as the body, they even view such attempts at self-enhancement quite negatively (Yoshida, Kojo, & Kaku, 1982). For these reasons, a tendency to a collective view of life even within Japanese society may enhance the level of body satisfaction by promoting a tendency for self-effacement.

Self-Esteem

Self-esteem is another major determinant of body satisfaction found across cultures. As the somatic self is a central part of one's self-concept, negative attitudes toward the body may be a product of low self-esteem (for review, see Freedman, 1990). There are myriad data linking self-esteem and various measures of body image (for review, see Lerner & Jovanovic, 1990), self-esteem and body satisfaction (Berscheid & Walster, 1974; Franzoi & Shields, 1984), and general satisfaction or self-evaluation and body satisfaction (Lerner, Karabenick, & Stuart, 1973). As for Japan, studies have revealed the link between the two constructs on the individual level (e.g., Kowner, 1996a, 2002a), whereas on the collective level, a number of studies have found the Japanese to express lower self-esteem than Americans (e.g., Demick et al., 1997; Shiota, Krauss, & Clark, 1996). The relatively lower self-esteem in Japan could be the result of different sources (emphasis on public roles rather than on personal traits) as well extended pressures for self-effacement. The resulting "modest" self is possibly an additional source of greater dissatisfaction with the body.

Collective Esteem

The esteem that individuals sense regarding the group to which they belong may also affect body satisfaction. Research has shown that perceptions of national status affect physical attractiveness stereotyping of ingroup and outgroup members. In a series of studies using Japanese subjects, Kowner (1996b) demonstrated the effect of national labeling on attractiveness evaluation and stereotyping of unfamiliar people. To be more specific, Kowner found that ranking of countries on various dimensions of national status resulted in a high correlation with ranking of group attractiveness. As quintessential members of an interdependent society, the Japanese manifest high sensitivity to and awareness of hierarchies, including the position of their nation in the world (Nakane, 1970). Thus, it is possible that the perceived status of Japan may affect individual body dissatisfaction. Collective esteem may reveal individual differences as well. Sato and Cameron (1999), who examined the relationship between various facets of collective self-esteem and independent or interdependent self-construals among undergraduates in Japan and Canada, found that individuals with highly inter-

dependent self-construals regarded social group membership as self-defining, regardless of culture. It is possible that individuals with greater collective esteem, based in part on the perception of national status, may also have greater collective body esteem and consequently greater body satisfaction.

Physical Appearance

The relations between one's body satisfaction and one's perceived (subjective) physical attractiveness level or actual (objective) physical attractiveness level are not as evident as one might expect. On the one hand, studies in the United States and Japan have revealed that people who are dissatisfied with their body tended to underrate their own level of physical attractiveness (Cash, Cash, & Butters, 1983; Kowner & Ogawa, 1995). On the other hand, no correlation was found between people's actual physical attractiveness level (as evaluated by others) and their body image (Cash & Soloway, 1975; Kowner & Ogawa). Particularly for Japanese, it is suggested that those who perceive themselves as having more typical Japanese body features may be expressing greater body dissatisfaction, because of the long idealization of Caucasian features in Japanese society.

Interpersonal Phobia (Social Anxiety)

Another determinant of body dissatisfaction in Japan is perhaps the relatively common predisposition to interpersonal phobia. A number of Japanese psychiatrists have contended that the specific characteristics of Japanese society and the resulting distinct personality type lead to the development of an interpersonal phobia known in Japanese as *taijin kyôfushô* (e.g., Doi, 1973; Kawai, 1975). *Taijin kyôfushô* is an indigenous Japanese diagnostic label for negative reaction to interpersonal situations, ranging from inconvenience through anxiety to fear (Tanaka-Matsumi, 1979). More important, this arguably culture-bound syndrome is the most common mental problem found in young Japanese adults (for review on prevalence, see Nagai, 1994, pp. 11–13).

The predisposition to interpersonal phobia among young Japanese adults is presumed to have relevance for body dissatisfaction. This is because one's body serves frequently as the source of one's anxiety. Morita (1938), who introduced the term *taijin kyôfushô* into the Japanese language, defined six subcategories of interpersonal phobia. Three of them directly concern the body: (a) fear of ugliness (fear of inducing negative feelings in others resulting from one's ugliness), (b) fear of one's own bad smell, and (c) fear of blushing. Recent studies have suggested that interpersonal phobia also has some affinity with Western-defined disorders, such as social phobia, depression, and schizophrenia, which have been associated with low body image in Western patients (Russell, 1989). Finally, Shibata (1990) and Kowner (2002a) found among Japanese students a positive correlation between Western measures of social anxiety and body dissatisfaction.

In the preceding review, I discussed the relevance of a number of factors assumed to determine or moderate scores of low body esteem among young Japanese adults. In the present study, I sought to investigate the effect of these determinants on Japanese body satisfaction. The main hypothesis was that an interplay between universal and culture-specific factors affect body satisfaction among young Japanese adults. The specific factors relevant to Japanese society include relatively high levels of discrepancy between perceived self and ideal and a high predisposition to interpersonal phobia. A secondary hypothesis of this study concerned the nature of the self-ideal discrepancy. It is presumed that an inclination in a given culture toward another culture's ideals, especially traits that have no effect on reproduction (e.g., hair color, shape of the eyes) and whose frequency is relatively low in the first culture, increases the physical self-ideal discrepancy of its members.

These hypotheses lead to several predictions regarding body dissatisfaction among young Japanese adults.

1. Global physical self-ideal discrepancy is a predictor of global body dissatisfaction, whereas physical self-ideal discrepancy for a single trait is a predictor of dissatisfaction in that trait.

2. The body ideals of Japanese young adults are biased toward idealized Western (Caucasian) appearance.

3. Subjects' ratings as looking "typically Japanese" are a predictor of body dissatisfaction and are negatively correlated with it and with ratings of their own physical attractiveness because "Japaneseness" may be conceived as contradictory to Western ideals.

4. A tendency to collectivism is a predictor of body dissatisfaction and is positively correlated with it.

5. Self-esteem is a predictor of body dissatisfaction and is negatively correlated with it.

6. Collective esteem is a predictor of body dissatisfaction and is negatively correlated with it.

7. Subjects' ratings of their own physical attractiveness are a predictor of body dissatisfaction and are negatively correlated with it.

8. Interpersonal phobia is a predictor of body dissatisfaction and is positively correlated with it.

Method

Participants

The participants were 263 undergraduates (120 women and 143 men; mean age = 20.7 years, $SD = 2.1$ years) enrolled in various courses at a private, middle-ranked university in the metropolitan area of Tokyo. All were Japanese nationals who participated as a part of fulfillment of course requirements. Because

the sample included students from all over Japan (but with some overrepresentation of students from the urban area around Tokyo) and the university is not selective, it may be considered as roughly representing the average Japanese college student population. I deleted scores of a further 14 subjects of other nationalities or of subjects who either did not understand the instructions or did not fully cooperate.

Testing Materials

Body Esteem Scale (BES). The dependent measure used to determine body satisfaction was the BES (Franzoi & Shields, 1984). The BES is composed of 35 body items found to make up young American adults' body-esteem dimensions, and it was also assessed for a Japanese young adult population (Kowner, 2002a). Respondents on the BES rate individual body parts and functions using a 5-point Likert scale ranging from 1 (*have strong negative feelings*) to 5 (*have strong positive feelings*). In the present study, I added the following items because of their presumed relevance to the group in question: skin color, stature, clothing, teeth, voice, and hair (41 items). To increase sensitivity, a 9-point (instead of the original 5-point) Likert scale was used, ranging from 1 (*have strong negative feelings*) through 5 (*no negative or positive feelings*) to 9 (*have strong positive feelings*).

Physical Self-Ideal Discrepancy Measure (PSID). This is based on several studies that examined self-ideal discrepancies in body shape and size (e.g., Cohn et al., 1987; Fallon & Rosin, 1985; Jacobi & Cash, 1994; Williamson, 1990). PSID expanded Jacobi and Cash's list of physical attributes to cover broader aspects of cultural biases and ethnic physiognomy, such as skin color, hair, and various features of the face. It incorporates 23 and 24 attributes for women and men, respectively; each is evaluated from two standpoints: (a) self-perception and (b) personal ideal (for further details on each item, see Appendix A). I calculated global body discrepancy separately for men and women by identifying relevant items and their relative importance by means of stepwise linear regression.

Individualism–Collectivism Scale. The Individualism–Collectivism Scale (Singelis, 1994) measures the independent (individualist) and interdependent (collective) construals of self and aims to identify the individual's disposition to one of these two poles of the self. It is a 24-item scale that contains an equal number of interdependent and dependent items rated on a 7-point Likert-type scale ranging from 1 (*absolutely disagree*) to 7 (*absolutely agree*) response format.

State Self-Esteem Scale. The State Self-Esteem Scale (Heatherton & Polivy, 1991) measures level of self-esteem and consists of 20 items modified from the widely used Janis–Field Feeling of Inadequacy Scale. In this study, items were rated on a 7-point Likert-type scale ranging from 1 (*absolutely disagree*) to 7 (*absolutely agree*) response format.

Collective Self-Esteem Scale. The Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) measures individual differences in collective, rather than personal, self-esteem. It consists of 16 items divided into four subscales: (a) membership esteem, (b) public collective self-esteem, (c) private collective self-esteem, and (d) importance for identity. In this study, this scale was rated on a 7-point Likert-type response format ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Attractiveness Self-Evaluation Inventory. This measures self-perceptions of one's physical attractiveness. It consists of six items regarding past and present perceptions adapted from Cash, Winstead, and Janda (1986) and is rated on a 9-point Likert-type scale response format ranging from 1 (*absolutely disagree*) to 9 (*absolutely agree*).

Japaneseness Scale. This measures self-perceptions of one's own appearance as similar to or dissimilar from the "typical Japanese look." It consists of two items concerning facial features and body form and is rated on a 9-point Likert-type scale ranging from 1 (*absolutely disagree*) to 9 (*absolutely agree*) response format.

Interpersonal Phobia Scale. The Interpersonal Phobia Scale (Nagai, 1994) measures predisposition to *taijin kyôfushô* (interpersonal phobia) and consists of 42 items. Among Japanese subjects, the items were found to yield three factors: (a) behavior and attitudes toward interpersonal situations, (b) self-awareness of relations, and (c) introvert self-awareness. This measure is rated on a 7-point Likert-type scale response format ranging from 1 (*absolutely disagree*) to 7 (*absolutely agree*).

Two bilingual persons independently translated into Japanese and back into English all the questionnaires originally written in English. A third person settled discrepancies to ensure cross-cultural equivalence.

Procedure

The study was conducted in two phases. In the first phase, the participants completed a battery of tests including the following scales: State Self-Esteem Scale, Collective Self-Esteem Scale, Individualism–Collectivism Scale, and Interpersonal Phobia Scale. The session was labeled a "comparative study on body perception within different age groups," and took about 30 min. This preliminary survey and the subsequent main survey were both presented by the Japanese instructor of the class, and all the questionnaires were filled in anonymously.

A week later, the second phase took place in class and was presented as "the second phase of last week's study." Initially, the participants were administered the modified BES, followed by the Attractiveness Self-Evaluation Inventory and the Japaneseness scale. After the participants inserted the questionnaires into en-

velopes and had a short break, they rated their perceived self and ideal self on various physical attributes using the PSID measure. Within the whole sample, 90 participants (59 women and 31 men) completed only the second main phase.

Results

Prevalence of Self-Ideal Discrepancy

I calculated discrepancies for each physical attribute between self-percepts and ideal self. For continuously scaled attributes (all attributes apart from the form of the face), I conducted repeated-measures analyses of variance (ANOVAs) for each sex, followed, if significant, by Newman-Keuls tests (see Table 1).

For men, significant discrepancies were found for 19 attributes, but not for voice, mouth width, chin form, weight, and body shape. For women, significant discrepancies were found for 20 attributes, but not for mouth width, chin form, and nose angle.

Although certain attributes did not show on average a discrepancy between self and ideal (Table 1), the data in Table 2 reveal the existence of wide individual incongruities. On average, men's self and ideal weight, for example, did not differ significantly, but in fact 41% of the male subjects wanted to lose 3 kg or more, 37% wished to gain 3 kg or more, and only 23% wished a change of less than ± 3 kg. A similar response can be observed for men's ratings of their body shape: 42% of them desired a bigger and more mesomorph figure, 38% desired a smaller figure (but not necessarily less mesomorph), and only 20% were satisfied with their current figure. Among men, 69% chose middle-sized, mesomorph with a tendency to slimness, body shapes (figures 4-5 on a continuum ranging from very thin body shape [1] to very obese body shape [9]). Similarly, other attributes that did not show any discrepancy were, in fact, not the result of a congruity: Only 30% of the men were satisfied with their voice, 34% were satisfied with their chin, and 49% were satisfied with their mouth width. Among the women, only 27%, 35%, and 55% were satisfied with their chin, mouth width, and nose angle, respectively.

Bias of Self-Ideal Discrepancy Toward Idealized Western Caucasian Appearance

A close examination of the body ideals manifested by the participants revealed a mixed picture regarding the bias of subjects' body ideals. On the one hand, participants unmistakably manifested a predisposition to Western Caucasian appearance and body ideals. Men, for example, showed a preference for lighter hair color; lighter and bigger eyes; bigger eyelid size and thinner eyebrow; more narrow, prominent, and longer nose; thinner lips; and taller stature. On the

TABLE 1. Comparisons of Self and Ideal Physical Attributes on Continuously Scaled Characteristics

Physical attribute	Range	Men (n = 142)				Women (n = 120)				
		Self-image		Personal ideal		Self-image		Personal ideal		F
		M	SD	M	SD	M	SD	M	SD	
Voice	1-9	4.54	1.61	4.32	1.54	4.53	1.73	5.39	1.16	39.9***
Hair type	1-9	3.34	1.45	2.95	0.92	3.55	1.17	3.03	1.26	16.6***
Hair color	1-9	1.34	0.85	2.79	2.25	1.58	0.98	2.73	1.37	30.7***
Hair length	1-7	2.92	1.14	3.31	1.51	5.74	1.45	5.98	1.55	17.1***
Eye color	1-9	1.50	0.89	2.75	2.31	1.81	1.02	3.05	1.91	25.9***
Eye size	1-9	5.07	2.19	6.10	2.01	6.72	1.79	7.44	1.58	15.8***
Eye lid size	1-9	3.65	2.24	4.81	2.16	4.78	1.96	5.93	1.61	35.1***
Eyebrow thickness	1-9	5.65	1.39	5.03	1.05	5.61	1.64	4.64	1.07	30.8***
Nose prominence	1-9	4.51	1.95	5.37	1.67	4.36	2.10	5.31	1.59	17.1***
Nose length	1-5	2.81	1.04	3.57	0.88	2.62	1.02	3.39	0.84	35.5***
Nose angle	1-3	1.91	0.65	2.04	0.48	1.80	0.65	1.91	0.32	2.2
Nose width	1-9	2.96	1.52	2.23	1.67	3.35	1.50	2.12	1.39	55.1***
Mouth width	1-9	4.09	2.10	4.37	2.03	4.00	1.91	4.26	2.12	1.3
Lips thickness	1-9	5.66	2.13	4.77	2.03	5.79	2.18	5.07	1.83	8.6**
Chin form	1-9	5.22	1.28	5.17	1.10	5.26	1.27	5.08	0.92	< 1
Skin color	1-9	5.23	1.75	4.30	1.55	5.66	1.72	6.81	1.49	36.7***
Height (cm)		171.60	5.62	179.76	5.16	158.15	5.07	162.13	5.31	36.6***
Weight (kg)		62.63	8.46	62.07	7.16	50.17	5.91	46.48	4.21	82.4***
Body shape	1-9	4.10	1.85	3.99	0.97	4.34	1.83	3.20	0.98	24.2***
Muscularity	1-9	3.65	1.47	5.21	0.98	3.35	1.61	3.70	1.39	10.5***
Leg form	1-9	4.20	1.75	4.93	0.88	4.03	1.89	4.98	0.56	27.7***
Breasts form	1-9					4.04	1.55	4.92	0.78	45.7***
Breasts size	1-9					4.47	1.90	6.05	1.05	108.3***
Facial hairiness	1-9	3.12	1.79	2.91	1.91					10.5***
Corporal hairiness	1-9	2.84	1.11	2.10	0.96					36.5***
Sex organ size	1-9	4.86	1.34	6.39	1.44					97.8***

*p < .05. **p < .01. ***p < .0001.

TABLE 2. Attributes of Ideal Body: Percentage of Men and Women Showing Discrepancy Between Self and Ideal Body Scores

Physical attribute	Description (low-high)	Men (n = 142)		Women (n = 120)		
		Lower score than self	Higher score than self	No discrepancy	Higher score than self	No discrepancy
Voice	1 (low)-9 (high)	39.0	31.2	29.8	61.7	16.7
Hair type	1 (straight)-9 (curly)	42.9	27.8	29.3	24.4	19.3
Hair color	1 (dark)-9 (light)	4.3	50.3	45.4	63.0	32.8
Hair length	1 (short)-7 (long)	19.2	34.0	46.8	33.6	47.1
Eye color	1 (dark)-9 (light)	2.8	39.4	57.8	49.6	42.0
Eye size	1 (small)-9 (big)	7.9	41.7	50.4	40.0	45.8
Eye lid size	1 (small)-9 (big)	14.4	45.3	40.3	50.0	40.0
Eyebrow thickness	1 (thin)-9 (thick)	44.4	15.0	38.6	15.3	30.5
Nose prominence	1 (sunken)-9 (prominent)	17.0	51.1	39.9	52.5	26.3
Nose length	1 (short)-5 (long)	11.5	52.5	36.0	64.7	24.4
Nose angle	1 (concave)-3 (convex)	14.3	26.4	59.3	29.4	54.6
Nose width	1 (narrow)-9 (wide)	50.7	17.2	32.1	14.4	19.5
Mouth width	1 (narrow)-9 (wide)	22.5	29.7	47.8	36.1	35.3
Lips thickness	1 (thin)-9 (thick)	40.6	11.6	47.8	17.6	39.5
Chin form	1 (sunken)-9 (prominent)	32.1	34.3	33.6	34.1	26.7
Skin color	1 (dark)-9 (light)	56.8	20.9	22.3	60.5	22.7
Height	cm (short)-cm (tall)	0	90.8	9.2	75.0	10.0
Weight	kg (light)-kg (heavy)	42.3	37.3	20.4	85.8	6.7
Body shape	1 (slim)-9 (obese)	41.8	38.3	19.9	24.2	8.3
Muscularity	1 (not muscular)-9 (muscular)	2.8	76.6	20.6	45.8	25
Leg form	1 (bowed)-9 (knocked-kneed)	15.6	46.1	38.3	53.4	32.2
Breasts form	1 (erected)-9 (pendulous)				19.3	17.7
Breasts size	1 (small)-9 (big)				73.3	15.0
Facial hairiness	1 (smooth)-9 (hairy)	37.7	22.5	39.8		
Corporal hairiness	1 (smooth)-9 (hairy)	53.3	5.0	41.7		
Sex organ size	1 (small)-9 (big)	2.9	65.9	31.2		

other hand, several of their manifested ideals can be considered as biased toward Caucasian appearance but also toward universal preference, such as greater muscularity, larger sex organ, and probably taller stature. Men also reported a few ideals, such as darker skin color, lesser facial and corporal hair, and straighter hair, that seem to contradict Western, and perhaps even universal, appearance ideals.

Women too showed a preference for lighter hair color; lighter and bigger eyes; bigger eyelid size and thinner eyebrows; more narrow, prominent, and longer nose; thinner lips; and lighter skin color. They also preferred taller stature, lower weight, and greater muscularity, which may be associated nowadays with modernity and female fashion. On the other hand, a number of their ideals can be considered universal: bigger and more rounded breasts and lighter skin color.

Relationships Between Self-Ideal Discrepancies and Global Body Esteem Evaluation

I investigated the role of self-ideal discrepancy on each physical attribute as a predictor of body dissatisfaction on these physical attributes. I calculated correlations between participants' absolute discrepancy scores and their total BES scores. In addition, I examined the association between self-ideal discrepancies on facial attributes and the face by calculating correlations between the absolute discrepancy scores and satisfaction with the face, a single item on the BES (Table 3).

Among men, significant negative correlations between the total BES score and self-ideal discrepancy score were found for the following items: weight, body shape, muscularity, sex organ size, chin form, lip thickness, eye size, and mouth width. Likewise, significant negative correlations were found between face satisfaction score and self-ideal discrepancy score for the following items: nose prominence, nose angle, nose width, corporal hairiness, skin color, and leg form.

Among women, significant negative correlations between the total BES score and self-ideal discrepancy score were found for the following items: weight, body shape, muscularity, skin color, nose angle, height, eyebrow thickness, and nose length. In addition, significant negative correlation was found between face satisfaction score and self-ideal discrepancy score for the following items: nose width, voice, and breast size.

To examine the independent additive contribution of discrepancies on each item in predicting body esteem, I calculated stepwise linear regression for men and women. Using backward regression (*F*-to-enter criterion: $p < .05$), I inserted any item in which self-ideal discrepancy correlated significantly with body esteem. For men, a 15-step solution of 21 initial independent variables was reached by the entry of personal discrepancy in body shape, weight, muscularity, leg form, chin, and sex organ, $R = .60$, $F(6, 115) = 12.2$, $p < .0001$. For women, a 14-step solution of 18 initial independent variables was reached by the entry of

TABLE 3. Correlations Between Physical Self-Ideal Discrepancy and Global Body Esteem and Face Esteem

Physical attribute	Men (<i>n</i> = 142)		Women (<i>n</i> = 120)	
	Body esteem	Face esteem	Body esteem	Face esteem
Voice	-.13	-.14	-.16	-.23*
Hair type	-.08	-.08	-.05	-.10
Hair color	.14	.09	-.01	-.12
Hair length	.06	-.03	-.13	-.09
Eye color	-.10	.03	-.04	-.14
Eye size	-.20*	-.30***	-.04	-.07
Eye lid size	-.07	-.14	-.04	-.07
Eyebrow thickness	-.11	-.15	-.22*	-.28**
Nose prominence	-.11	-.36***	-.14	-.15
Nose length	-.12	-.15	-.19*	-.26**
Nose angle	-.23*	-.36***	-.20*	-.20*
Nose width	-.14	-.24**	-.04	-.21*
Mouth width	-.18*	-.08	-.06	-.02
Lips thickness	-.17*	-.08	-.04	-.11
Chin form	-.18*	-.27***	-.11	-.07
Skin color	-.13	-.16*	-.31**	-.34***
Height	-.03	-.02	-.27**	-.35***
Weight	-.27***	-.14	-.38***	-.10
Body shape	-.39***	-.20*	-.24**	-.12
Muscularity	-.27***	-.12	-.21*	-.16
Leg form	-.16	-.20*	-.02	-.02
Breasts form			-.12	-.16
Breasts size			-.18	-.29**
Facial hairiness	.00	.02		
Corporal hairiness	-.13	-.19*		
Sex organ size	-.23**	-.21*		

Note. Body esteem score is the total of the 35 items on the BES (Franzoi and Shield, 1984). The face esteem score is 1 item on the BES.

* $p < .05$. ** $p < .01$. *** $p < .0001$.

personal weight, height, eyebrow discrepancy, and nose form, $R = .50$, $F(4, 111) = 11.5$, $p < .0001$.

The Importance of Self-Ideal Discrepancy in Determining Body Dissatisfaction

I examined the role of self-ideal discrepancy in determining body satisfaction in two ways. First, I calculated the correlations between self-ideal discrep-

ancies of specific attributes and the attitudinal evaluation of these attributes as measured by the BES. Table 4 shows that physical self-ideal discrepancies may serve as a relatively reliable predictor of body dissatisfaction for many body organs for both men and women, especially for nonfacial items, such as skin color, height, weight, and body shape, and also breasts for women.

The Role of Other Determinants of Body Dissatisfaction

To examine the role of the presumed determinants of body dissatisfaction, I calculated a correlation matrix of global body discrepancy, body esteem, self-esteem,

TABLE 4. Physical Self-Ideal Discrepancy as a Predictor of Body Dissatisfaction: Correlations Between Single Attributes of Body Esteem (BES) and Physical Self-Ideal Discrepancy (PSID) of Single Attributes

Esteem measure	Discrepancy measure	Men (<i>n</i> = 142)	Women (<i>n</i> = 120)
Voice	Voice	-.13	-.30***
Hair	Hair type	-.16	-.24**
Hair	Hair color	.12	-.11
Hair	Hair length	-.14	.00
Appearance of the eyes	Eye color	-.08	-.08
Appearance of the eyes	Eye size	-.35***	-.22*
Appearance of the eyes	Eye lid size	-.23**	-.35***
Appearance of the eyes	Eyebrow thickness	-.13	-.19*
Nose	Nose prominence	-.14	-.09
Nose	Nose length	-.30***	-.13
Nose	Nose angle	-.19*	-.31***
Nose	Nose width	-.22**	-.33***
Lips	Mouth width	-.23**	-.11
Lips	Lips thickness	-.31***	-.28**
Lips	Chin form	-.12	-.20*
Chin	Chin form	-.20*	-.21*
Skin color	Skin color	-.53***	-.56***
Height	Height	-.43***	-.63***
Weight	Weight	-.50***	-.61***
Physique or figure	Body shape	-.39***	-.33***
Body build	Muscularity	-.21*	-.07
Leg	Legs form	-.10	-.09
Breasts	Breasts form		-.45***
Breasts	Breasts size		-.62***
Body hair	Facial hairiness	-.19*	
Body hair	Corporal hairiness	-.26**	
Sex organ	Sex organ size	-.17*	

p* < .05. *p* < .01. ****p* < .0001.

collective esteem, level of individualism–collectivism, interpersonal phobia, attractiveness, and Japaneseness. The data in Table 5 reveal a significant positive correlation between body satisfaction and self-esteem, collective esteem, and self-ratings for attractiveness, for both men and women, and a significant negative correlation between body satisfaction and level of global body discrepancy, predisposition to interpersonal phobia, level of collectivism, and level of Japaneseness. In addition, level of global body discrepancy negatively correlated with self-esteem and attractiveness and positively correlated with predisposition to interpersonal phobia (Table 5).

Discussion

In previous studies on body image in Japan researchers emphasized the role the cultural dictum of humble self-presentation plays in the Japanese low self-rating. Although in the present study I do not preclude this account, I attempt to offer a broader account based on both culture-specific and cross-cultural factors. The culture-specific factors I focused on consist of a tendency for relatively wide physical self-ideal discrepancy, especially regarding facial features, and an inclination toward interpersonal phobia among young Japanese adults. The findings indicate that body satisfaction level among young Japanese adults is associated with global body discrepancy, interpersonal phobia, level of individualism, level of Japaneseness, as well as level of self-esteem, self-evaluation of one's attractiveness, and collective esteem. Overall, the results of this study suggest that culture has a significant role in determining collective body image in Japan and that a broader conceptualization of physical self-ideal discrepancy may explain the greater part of the body dissatisfaction phenomenon in various cultures, non-Western cultures in particular.

Physical Self-Ideal Discrepancy and Body Satisfaction

The results of the correlational investigation indicate strong support for the notion that discrepancy between self and ideal body (physical self-ideal discrepancy) is associated with body satisfaction. It seems that the wider the discrepancy between individuals' bodily perceptions and ideals on a wide variety of bodily attributes, the greater dissatisfaction with their body individuals feel. The findings also reveal that young Japanese adults manifest body ideals similar in orientation but not necessarily in magnitude to those in the West. Many of the similarities, however, such as preference for higher stature, a mesomorph body for men, and relatively large breasts for women, can be explained as a mere reflection of universal mate preferences related to sexual selection (e.g., Symons, 1979). Although much research is still needed to establish the notion of universality regarding preferences of physical appearance, it is not surprising that in this study I replicated the physical self-ideal discrepancies Jacobi and Cash (1994) found among American subjects. Both American and Japanese men want in most cases to be taller

TABLE 5. Correlations Between Body Esteem and Other Scales

Scale (range)	M	SD	1	2	3	4	5	6	7	8
1. Body esteem (41 [low]–369 [high])										
All	169.9	38.2	—	.49***	.24**	-.17*	-.25**	.46***	-.14*	
Men	175.7	42.9	—	.49***	.31**	-.15	-.24*	.43***	-.10	-.43***
Women	162.9	30.3	—	.50***	.25	-.09	-.37**	.47***	-.17	-.52***
2. Self-esteem (20 [low]–140 [high])										
All	72.5	12.5	—	—	.31***	-.41*	-.73***	.34***	.01	
Men	73.4	12.9	—	—	.45***	-.36**	-.75***	.28**	.01	-.29**
Women	70.7	11.8	—	—	.09	-.48**	-.70***	.43**	.05	-.41**
3. Collective esteem (16 [low]–112 [high])										
All	59.5	11.7	—	—	—	.06	-.33***	.23**	.11	
Men	61.0	11.6	—	—	—	-.05	-.37**	.33**	.07	-.05
Women	56.8	11.4	—	—	—	.19	-.26	.19	.11	-.22
4. Individualism–collectivism (24 [individualism]–168 [collectivism])										
All	90.5	13.0	—	—	—	—	-.29**	-.01	.05	
Men	88.8	13.1	—	—	—	—	-.29**	.01	.01	.20
Women	93.5	12.4	—	—	—	—	-.36**	.06	.07	.24
5. Interpersonal phobia (42 [low]–294 [high])										
All	179.7	43.3	—	—	—	—	—	-.26**	-.06	
Men	178.0	44.4	—	—	—	—	—	-.32**	.05	.26*
Women	182.8	41.5	—	—	—	—	—	-.21	-.21	.29*
6. Attractiveness (6 [low]–54 [high])										
All	29.9	6.96	—	—	—	—	—	—	-.21**	
Men	31.1	6.90	—	—	—	—	—	—	-.17	-.27**
Women	28.4	6.78	—	—	—	—	—	—	-.20*	-.37**
7. Japaneseness (2 [low]–18 [high])										
All	12.1	3.46	—	—	—	—	—	—	—	
Men	11.7	3.22	—	—	—	—	—	—	—	-.07
Women	12.6	3.68	—	—	—	—	—	—	—	-.13
8. Global body discrepancy										
Men (6.2–31.5)	16.9	5.80	—	—	—	—	—	—	—	—
Women (3.0–35.0)	16.0	6.44	—	—	—	—	—	—	—	—

Note. Number of observations for all participants = 263, men = 143, and women = 120. Number of observations for self-esteem, collective esteem, individualism–collectivism, and interpersonal phobia scales = 143, 93, and 50, respectively. Number of observations for global body discrepancy for women and men = 117 and 121, respectively. Global body discrepancy scores for men and women cannot be compared; range represents actual range. * $p < .05$. ** $p < .01$. *** $p < .0001$.

and more muscular, and women want to be lighter, more muscular, a little taller, and to have a thinner body with bigger breasts.

Nevertheless, the Japanese respondents also manifested certain physical self-ideal discrepancies that Jacoby and Cash (1994) had not found in their study, and one may assume that those discrepancies are less likely to appear in representative American or European samples (where supposedly similar ideals are prevalent). The difference between the Japanese discrepancies in the present study and the American discrepancies in Jacoby and Cash's study seems to concentrate on the face, in which the Japanese of both sexes manifested large self-ideal discrepancies. Facial features in which I found a distinct discrepancy include the nose (a preference for a longer and narrower nose), eyes (larger and lighter with bigger eyelids), hair (lighter), and among women also skin color (lighter). Some of these discrepancies not only seem to be the result of a partial adoption of Western ideals but are also in contrast to traditional Japanese beauty ideals, such as narrow eye shape and black hair color (Haruyama, 1988, 1989). Other discrepancies, such as the extreme preference for high stature among men and the preference for bigger breasts among women, can be interpreted probably as the outcome of both universal and contemporary cultural preferences.

I found preferences for indigenous rather than Western or universal ideals for only a few items. Both men and women wanted even straighter hair than what they had. Men wished to be less hairy, which seems at first glance to contradict common sexual dimorphism. Nonetheless, this preference, which was identified earlier in a nonempirical manner (Miller, 2002), might be attributed to current trends of feminization and childish cuteness popular among Japanese youth (Ihara, 1994; Kinsella, 1995) as well as an increased interest in gay culture (so-called 'gay boom', see Lunsing, 1997). The preference for darker skin among men can be attributed to a possible confusion of this item with tanning. Another interpretation, however, corroborates Hulse's (1967) suggestion that Japanese men are darker than women because of sexual selection. If skin color is indeed a dimorphic characteristic in Japan, as Hulse suggested, it may prompt Japanese men to view darker skin as a sexual characteristic and, therefore, more attractive.

There were no conspicuous sex differences in physical self-ideal discrepancies. Although Japanese men were found to manifest greater body esteem than were women, the self-ideal discrepancies found for both sexes were fairly similar. That is, their self- and ideal images of various attributes were mostly in the same direction and of similar discrepancy. Men and women differed, however, in a few body attributes that tend to be sexually dimorphic, such as voice and skin color. In these attributes self- and ideal images were in the opposite directions for both women and men. Additional differences were found in weight and body shape. Women unanimously wanted to be thinner and lighter, whereas men were divided between those who wanted smaller and lighter figures and those who wanted larger and heavier figures. Despite these minute differences, the high correlations of self- and ideal precepts between men and women demonstrate the strength of col-

lective perceptions. The similarity may also be a mirror of a postmodern society in which the differences between the sexes concerning the body are ever diminishing.

Unique Determinants of Japanese Body Dissatisfaction

The findings confirm the hypotheses postulated regarding the role of additional moderating factors of body dissatisfaction in Japan. As in other cultures, self-esteem highly correlated with body satisfaction and appeared to be a primary predictor of body dissatisfaction. Guinn, Semper, and Jorgensen (1997) reached similar conclusions in their study with Mexican American female adolescents. They found self-esteem to be the most powerful predictor of body-satisfaction scores. They also found collective esteem to predict body dissatisfaction among both men and women; similar to self-esteem, the lower the esteem the greater the body dissatisfaction. Collective self-esteem seems to be related to self-esteem, psychological well-being, and life satisfaction, especially among groups with a tendency toward Asian-style collectivism. Crocker, Luhtanen, Blain, and Broadnax (1994), who compared Black, White, and Asian students, found among the latter the highest correlation among the above measures. Furthermore, Asians were the only group to show strong relations between the Private and the Public subscales of the Collective Self-Esteem Scale. A tendency toward individualism also showed a significant but low correlation with body satisfaction. This finding might also be moderated by the inclination of subjects who manifested collectivism to lower self- and collective esteem.

Because young Japanese adults have a predisposition toward interpersonal phobia (*taijin kyōfushō*), a negative reaction to interpersonal situations common among young Japanese adults seems to moderate greater physical self-ideal discrepancy. My findings of a significant positive correlation between physical self-ideal discrepancy and interpersonal phobia for both men and women corroborate Kobayashi's (1993) earlier study among Japanese students. Kobayashi found that university students with higher than average inclination toward interpersonal phobia had significantly greater discrepancies on various personality aspects, including ratings of physical attractiveness, than did those who had lower than average inclination. Finally, perceiving oneself as not attractive was also highly correlated with body dissatisfaction, and similarly perceiving oneself as looking typically Japanese was weakly but significantly correlated with body dissatisfaction. Whereas the former correlation is fairly evident, the latter is challenging because it points out the low status of the indigenous look among present-day young Japanese adults and partly elucidates the high level of physical self-ideal discrepancy found in this study.

Japanese Physical Self-Ideal Discrepancy in a Historical Perspective

The Japanese cultural sense of discrepancy between self and ideal regarding the body apparently originated in the latter half of the 19th century. During that

period, Japanese society underwent a rapid and all-embracing process of modernization, which included changes in clothing, hairstyle, and cosmetics, as well as a major transformation of body ideals and concepts of sexuality (Kowner, 1996b; Wagatsuma, 1967). Many innovations at that time, argued historian Edwin Reischauer, “were not really necessary to modernization but were merely imitations of Western customs” (Fairbank, Reischauer, & Craig, 1989, p. 523). One such innovation, so to speak, was the borrowing of Western notions regarding physical beauty and racial hierarchy (Kowner, 2005). The spread of foreign ideals could be observed in many societies, but the Japanese were perhaps more susceptible to cultural borrowing in that period than any other group. Whereas technological modernization was successful, so that Japan became a great military power during the early decades of the 20th century, the personal body was more resistant to change, and the feeling of discrepancy with the newly acquired ideals remained acute.

The acceptance of external body ideals that markedly differ from those common in a group is likely to affect its members’ body image. Even limited acceptance of an outgroup’s collective body ideals may open a wide gap between the borrowing group’s perceptions of its own physique and its ideals. Being part of the West, and yet non-Caucasian, the Japanese, urbanites and educated people in particular, tended keenly to experience low body esteem in the early stages of their modernization; this tendency seems to have lingered ever since (Kowner, 2002b).

Although the chronicles of identification with the West are intricate and show ups and downs (Befu, 1995), there is much empirical evidence to support the above contentions, at least regarding the domain of the body, and the legacy of this identification can be tracked even today (Kowner, 2005). The Japanese are also likely to manifest lower body satisfaction than their Asian neighbors (cf. Kowner, 2002a). A survey of women conducted by a Japanese newspaper in seven East Asian capitals suggested that the level of modernization (and often of Westernization) and national character play an important role in determining body satisfaction (Ishibashi, 1996). The Japanese were the least satisfied with their body, as 66% of them rated themselves somewhat or very dissatisfied with their body. Women from mainland China were the most satisfied, with only 18% feeling dissatisfied. In Japan the desire for a thinner body starts at a relatively young age: Ohtahara, Ohzeki, Hanaki, and Motozumi (1993) found that 41% of elementary school girls and 68% of high school girls perceived their ideal weight to be less than the standard, suggesting that even normal-weight girls wanted to lose weight.

No wonder, then, that the prevalence of eating disorders in Japan, albeit lower than in the West, is also greater than in other East Asian countries (Ishibashi, 1996; Nakamura, Hoshino, Watanabe, Honda, Niwa, & Yamamoto, 1999; Nakamura, Hoshino, Wantanabe, Honda, Niwa, Tominagar, et al., 1999). Compared with the Japanese, East Asians tend to express less concern over obe-

sity and thinness because both the concern and the resulting eating disorders are closely tied to affluence (cf. Kiriike, Nagata, Sirata, & Yamamoto, 1998) and to core societal values in the West, such as self-control and maturing individualism. Still, many Japanese, who enjoy greater affluence and individualism than their Asian neighbors and are more disposed to Western fashions and body ideals, lack certain physical features that they tend to idealize, such as light hair color, wide eyes, prominent nose and thus are more likely to experience physical self-ideal discrepancy (for the link between this discrepancy and eating disorder in Japan, see Nishizawa et al., 2003). These features are probably idealized in many other non-Western cultures, as Shohat and Stam (1995) aptly observed, yet it appears as if this idealization is greater in Japan (e.g., Kitahara, 1989).

Self-Enhancement Needs and the Body: The Japanese Case

Although the above historical account may provide sufficient rationale for the lower levels of body satisfaction found among young Japanese adults, their relatively low score in the present study may also stem from a lesser need for self-enhancement, particularly in the domain of the body. Among the most prominent psychological characteristics of many Asian cultures that share the Confucian tradition are humility, modesty, and greater dependence on group support. One evident outcome of these social dicta is relatively limited self-enhancement. Many studies have demonstrated that self-enhancing motivations are far weaker, if not generally absent, among East Asians. In the West, North America in particular, individuals are motivated to view themselves in positive terms; in East Asia, Japan in particular, individuals are expected to maintain social roles and perform a set of obligations and duties to others in the group while presenting themselves in rather neutral terms (Heine, 2003; Yik, Bond, & Paulhus, 1998). Related studies also found that Japanese tend to engage in very limited self-evaluation, and when they do, their evaluations are more affected by failures than successes (e.g., Cross, Liao, & Josephs as cited in Heine, 2001; Heine & Lehman, 1997; Kitayama et al., 1997). Studies have shown that East Asians tend to recall events regarding negative information better (Meijer, Heine, & Yamagami as cited in Heine, 2001) and are more willing to accept information indicating their failures (Heine, Takata, & Lehman, 2000).

Some studies have provided evidence that cultural differences in self-enhancement and self-criticism go beyond mere self-presentation. A study by Heine et al. (2000) assessed self-enhancement in a laboratory setting, where participants' behaviors were covertly measured. Whereas Canadians were reluctant to conclude that they had performed worse than their average classmate, Japanese participants were hesitant to conclude that they had performed better. Brown and Kobayashi (2002) suggested that self-enhancing tendencies vary in kind across cultures. The body is a domain that is more often selected by Westerners for self-enhancement. Instead of self-enhancement focused on the body, the

Japanese self seems better characterized by a need to secure a positive view from others rather than from oneself. This need seems better served by self-improvement than self-enhancement (Heine et al., 1999; Kitayama et al., 1997).

All in all, strong evidence exists that Japanese culture discourages the display of self-enhancing attitudes and may even promote the acceptance of self-relevant information that is negative. Hence, Japanese are inclined to identify their shortcomings and make efforts at improving themselves. This tendency may indeed account, at least partly, for the lower body satisfaction found in the present study or even the very willingness to profess a low body image. Yet, do not the persistently lower body satisfaction and the consequent negative attractiveness comparison hurt the self?

The effect of the attractiveness comparison may not be as painful as might be expected by Western readers (Kowner, 1996a). Japanese are likely to exhibit wider actual-ideal and actual-ought self-discrepancies than North Americans in other domains as well (Heine & Lehman, 1999; Meijer, Heine, & Yamagami as cited in Heine, 2001). These self-critical views appear to be associated with fewer negative consequences. It is also plausible that the body does not play such an important role in Japanese daily life as in the West. In a study of sex differences in human mate preference in 37 cultures, Buss (1989) found that Japanese subjects (mean age = 20 years) rated the criterion of a mate's good looks third lowest among the 37 participant cultures. Although Japanese certainly maintain distinctions between attractive and unattractive, beautiful and ugly, and are exposed to the beauty stereotypes (Kowner, 1996b; Kowner & Ogawa, 1993), they may not attach to the attribute of beauty the importance accorded it in West. They do not view it as an indispensable element in selecting a mate or as a significant factor at work, the dominant domain of life. Not only do Japanese tend to award physical attractiveness lower priority than Westerners, they also report feeling emotions less intensely and for shorter durations than do Americans (Matsumoto, 1996; Matsumoto, Kudoh, Scherer, & Wallbott, 1988).

Overall, the results of this study do not preclude earlier evidence for lower self-enhancement among Japanese in the domain of the body, but they suggest that in addition to universal and regional factors there may be culture-specific factors that shape collective body images and negatively affect body dissatisfaction among young adults in contemporary Japan. Furthermore, the results of this study indicate that broader conceptualization of physical self-ideal discrepancy, apart from body form and body mass, may better explain body dissatisfaction phenomena across cultures, non-Western in particular.

REFERENCES

- Befu, H. (1995). Swings of Japan's identity. In S. Clausen, R. Starrs, & A. Wedell-Wedellsborg (Eds.), *Cultural encounters: China, Japan, and the West* (pp. 241-265). Aarhus, Denmark: Aarhus University Press.
- Berscheid, E., & Walster, E. H. (1974). Physical attractiveness. In L. Berkowitz (Ed.), *Ad-*

- vances in experimental social psychology (Vol. 7, pp. 156–213). New York: Academic Press.
- Brown, J. D., & Kobayashi, C. (2002). Self-enhancement in Japan and America. *Asian Journal of Social Psychology*, 5, 145–168.
- Buss, D. M. (1989). Sex differences in human mate selection preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12, 1–47.
- Cash, T. F., Cash, D. W., & Butters, J. (1983). “Mirror, mirror, on the wall. . . ?”: Contrast effects and self-evaluations of physical attractiveness. *Personality and Social Psychology Bulletin*, 9, 351–358.
- Cash, T. F., & Pruzinsky, T. (Eds.). (1990). *Body images: Development, Deviance, and Change*. New York: Guilford Press.
- Cash, T. F., & Soloway, D. (1975). Self-disclosure of physical attractiveness: An exploratory study. *Psychological Reports*, 36, 579–586.
- Cash, T. F., Winstead, B. A., & Janda, L. H. (1986, April). The great American shape-up. *Psychology Today*, 30–37.
- Cohn, L. D., Adler, N. E., Irwin, C. E., Millstein, S. G., Kegeles, S. M., & Stone, G. (1987). Body-figure preferences in male and female adolescents. *Journal of Abnormal Psychology*, 96, 276–279.
- Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among White, Black, and Asian college students. *Personality and Social Psychology Bulletin*, 20, 503–513.
- Cusumano, J. A., Robinson, S. E., & Morooka, F. (1989). Physical self-efficacy levels in Japanese and American university students. *Perceptual and Motor Skills*, 69, 912–914.
- Daibo, I. (1988). Kao no ishiki - kao, yokogao soshite jiko ishiki [Facial awareness, face, profile and self-consciousness]. *Keshô Bunka*, 18, 76–88.
- Daibo, I. (1991). Yôbô no kôzôteki tokuchô to taijin miryoku [Attractiveness impression of structural characteristics in human face]. *Keshô Bunka*, 24, 55–68.
- Demick, J., Ishii, S., & Inoue, W. (1997). Body and self-experience: Japan versus USA. In S. Wapner, J. Demick, T. Yamamoto, & T. Takahashi (Eds.), *Handbook of Japan–United States environment–behavior research: Toward a transactional approach* (pp. 83–99). New York: Plenum Press.
- Doi, T. (1973). *The Anatomy of dependence*. (John Bester, Trans.) Tokyo: Kodansha.
- Fairbank, J. K., Reischauer, E. O., & Craig, A. M. (1989). *East Asia: Tradition and transformation*. Boston: Houghton Mifflin Company.
- Fallon, A., & Rosin, P. (1985). Sex differences in perceptions of desirable body shape. *Journal of Abnormal Psychology*, 94, 102–105.
- Farkas, L. G., Hreczko, T., & Deutsch, C. K. (1983). Objective assessment of standard nostril types: A morphometric study. *Annals of Plastic Surgery*, 11, 381–389.
- Fisher, S. (1986). *Development and structure of the body image*. Hillsdale, NJ: Erlbaum.
- Franzoi, S. L., & Shields, S. A. (1984). The Body Esteem Scale: Multi-dimensional structure and sex differences in a college population. *Journal of Personality Assessment*, 48, 173–178.
- Freedman, R. (1990). Cognitive–behavioral perspectives on body-image change. In T. F. Cash & T. Pruzinsky (Eds.), *Body images: Development, deviance, and change* (pp. 272–295). New York: Guilford Press.
- Grogan, S. (1999). *Body Image: Understanding body dissatisfaction in men, women and children*. London: Routledge.
- Guinn, B., Semper, T., & Jorgensen, L. (1997). Mexican American female adolescent self-esteem: The effect of body image, exercise behavior, and body fatness. *Hispanic Journal of Behavioral Sciences*, 19, 517–526.
- Haruyama, Y. (1988). *Keshô* [Make-up]. Tokyo: Heibonsha.
- Haruyama, Y. (1989). *Kami* [Hair]. Tokyo: Heibonsha.

- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*, *60*, 895–910.
- Heine, S. J. (2001). Self as a product of culture: An examination of East Asian and North American selves. *Journal of Personality*, *69*, 881–906.
- Heine, S. J. (2003). Making sense of East Asian self-enhancement. *Journal of Cross-Cultural Psychology*, *34*, 596–602.
- Heine, S. J., & Lehman, D. R. (1995). Social desirability among Canadian and Japanese students. *Journal of Social Psychology*, *135*, 777–779.
- Heine, S. J., & Lehman, D. R. (1999). Culture, self-discrepancies, and self-satisfaction. *Personality and Social Psychology Bulletin*, *25*, 915–925.
- Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, *106*, 766–794.
- Heine, S. J., Takata, T., & Lehman, D. R. (2000). Beyond self-presentation: Evidence for self-criticism among Japanese. *Personality and Social Psychology Bulletin*, *26*, 71–78.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319–340.
- Higgins, E. T. (1989). Self-discrepancy theory: What patterns of self-beliefs cause people to suffer. In L. Berkowitz (Eds.), *Advances in experimental social psychology* (Vol. 22, pp. 93–136). New York: Academic Press.
- Higgins, E. T., Klein, R., & Strauman, T. (1985). Self-concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. *Social Cognition*, *3*, 51–76.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hulse, F. S. (1967). Selection of skin color among the Japanese. *American Journal of Physical Anthropology*, *27*, 143–155.
- Ihara, K. (1994, August 15). Otoko to onna no genkaisen ga toketeyuku [The line between man and women is melting]. *Area*, *7*(33), 10–11.
- Ishibashi, A. (1996, March 11). Beauty quest fattens purses of “miracle” vendors. *The Nikkei Weekly*, *34*, 1.
- Ito, K. (1994). Images of women in weekly male comic magazines in Japan. *Journal of Popular Culture*, *27*, 81–95.
- Jacobi, L., & Cash, T. F. (1994). In pursuit of the perfect appearance: Discrepancies among self-ideal percepts of multiple physical attributes. *Journal of Applied Social Psychology*, *24*, 379–396.
- Kawai, H. (1975). Jiga, haji, kyofu: Taijin kyofusho no seikai kara [Ego, shame, and phobia seen from the world of social phobia]. *Shiso*, *62*, 23–28.
- Keeton, W. P., Cash, T. F., & Brown, T. A. (1990). Body image or body images. *Journal of Personality Assessment*, *54*, 213–330.
- Kelsky, K. (2001). *Women on the verge: Japanese women, western dreams*. Durham, NC: Duke University Press.
- Kinsella, S. (1995). Cuties in Japan. In L. Skov & B. Moeran (Eds.), *Women, media and consumption in Japan* (pp. 220–254). Honolulu: University of Hawaii Press.
- Kiriike, N., Nagata, T., Sirata, K., & Yamamoto, N. (1998). Are young women in Japan at high risk for eating disorders? Decreased BMI in young females from 1960 to 1995. *Psychiatry and Clinical Neurosciences*, *52*, 279–281.
- Kitahara, M. (1989). *Children of the sun: The Japanese and the outside world*. Sandgate, Folkstone, England: Paul Norbury.
- Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes of self-esteem management: Self-enhancement in the United States and self-depreciation in Japan. *Journal of Personality and Social Psychology*, *72*, 1245–1267.

- Kobayashi, M. (1993). *Relations between anthropophobia and actual self-ideal self-discrepancy*. Unpublished undergraduate thesis, Cluster of Human Science, Tsukuba University, Japan.
- Kowner, R. (1995). Physical attractiveness comparison and its effects on choice of partners. *The Journal of Social Psychology*, 135, 153–165.
- Kowner, R. (1996a). Susceptibility to physical attractiveness comparison: On the role of attributions in protecting self-esteem. *Psychologia*, 39, 150–161.
- Kowner, R. (1996b). Effect of group status on physical attractiveness preferences—From the Japanese case to a general cognitive perspective. *Genetic, Social, and General Psychology Monographs*, 122, 215–248.
- Kowner, R. (2002a). Japanese body esteem: Structure and values in a cross-cultural perspective. *Journal of International Psychology*, 37, 149–159.
- Kowner, R. (2002b). The Other as ideal: Japanese corporality and the West. *Zmanim: A Historical Quarterly*, 75, 65–81 [In Hebrew].
- Kowner, R. (2006). Universal process or unique case of cultural adaptation? Japanese body image and its transformation since the Meiji era. In J. Kyburz (Ed.), *Japanese Perception and Representation of the Human Body*. London: Routledge (forthcoming).
- Kowner, R., & Ogawa, T. (1993). The contrast effect of physical attractiveness in Japan. *The Journal of Psychology*, 127, 51–64.
- Kowner, R., & Ogawa, T. (1995). The role of raters' sex, personality, and appearance in judgments of facial beauty. *Perceptual and Motor Skills*, 81, 339–349.
- Kuchi moto no bi anketo [Of the mouth and smile; Editorial]. (1989). *Keshô Bunka*, 20, 15–29.
- Kurman, J. (2003). Why is self-enhancement low in certain collectivist cultures? An investigation of two competing explanations. *Journal of Cross-Cultural Psychology*, 34, 496–510.
- Kuwabara, T. (1983). *Japan and western civilization: Essays on comparative culture*. Tokyo: University of Tokyo Press.
- Langlois, J. H., Kalakanis, L., Rubenstein, A. J., Larson, A., & Hallam, M. (2000). Maxims or myths of beauty? A meta-analytic and theoretical review. *Psychological Bulletin*, 126, 390–423.
- Lerner, R. M., Iwawaki, S., Chihara, T., & Sorell, G. T. (1980). Self-concept, self-esteem, and body attitude among Japanese male and female adolescents. *Child Development*, 51, 847–855.
- Lerner, R. M., & Jovanovic, J. (1990). The role of body image in psychological development across the life span: A developmental contextual perspective. In T. F. Cash & T. Pruzinsky (Eds.), *Body images: Development, deviance, and change* (pp. 110–127). New York: Guilford Press.
- Lerner, R. M., Karabenick, S. A., & Stuart, J. L. (1973). Relation among physical attractiveness, body attitudes and self-concept in male and female college students. *The Journal of Psychology*, 85, 119–129.
- Lincoln, J. R. (1989). Employee work attitudes and management practice in the U.S. and Japan: Evidence from a large comparative survey. *California Management Review*, Fall, 89–106.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302–318.
- Lunsing, W. (1997). Gay boom in Japan: Changing views of homosexuality? *Thamyris*, 4(2), 267–293.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implication for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Martin, R., & Saller, K. (1956). *Lehrbuch der Anthropologie* [Textbook of Anthropology]. Vols. 1–4. Stuttgart, Germany: G. Fisher.

- Matsumoto, D. (1996). *Unmasking Japan: Myths and realities about the emotions of the Japanese*. Stanford, CA: Stanford University Press.
- Matsumoto, D., Kudoh, T., Scherer, K. R., & Wallbott, H. G. (1988). Antecedents of and reactions to emotions in the United States and Japan. *Journal of Cross-Cultural Psychology*, *19*, 267–286.
- Miller, L. (2002). Male beauty work in Japan. In J. E. R. Roberson & N. Suzuki (Eds.), *Men and masculinities in contemporary Japan* (pp. 37–58). London: Routledge
- Morita, S. (1938). Sekimen kyôfushô (mata wa taijin kyôfu) to sono ryôhō [Fear of blushing (or interpersonal fear) and its therapy]. *Shinkeishitsu*, *3*, 172.
- Nagai, T. (1994). *Taijin Kyôfu no Shinri—Taijin Kankei no Nayami no Bunseki* [The psychology of fear of people—An analysis of the distress in human relations]. Tokyo: Science Sha.
- Nakamura, K., Hoshino, Y., Watanabe, A., Honda, K., Niwa, S., Tominaga, K., et al. (1999). Eating problems in female Japanese high school students: A prevalence study. *International Journal of Eating Disorders*, *26*, 91–95.
- Nakamura, K., Hoshino, Y., Watanabe, A., Honda, K., Niwa, S., & Yamamoto, M. (1999). Eating problems and related weight control behaviour in adult Japanese women. *Psychotherapy and Psychosomatics*, *68*, 51–55.
- Nakane, C. (1970). *Japanese society*. Tokyo: Tuttle.
- Nishizawa, Y., Kida, K., Nishizawa, K., Hashiba, S., Saito, K., & Mita, R. (2003). Perception of self-physique and eating behavior of high school students in Japan. *Psychiatry and Clinical Neurosciences*, *57*, 189–196.
- Ohtahara, H., Ohzeki, T., Hanaki, K., & Motozumi, H. (1993). Abnormal perception of body weight is not solely observed in pubertal girls: Incorrect body image in children and its relationship to body weight. *Acta Psychiatrica Scandinavica*, *87*, 218–222.
- Olivier, G. (1961). *Morphologie et types humains* [Morphology and Human Types]. Paris: Vigot Freres.
- Russell, J. G. (1989). Anxiety disorders in Japan: A review of the Japanese literature on *shinkeishitsu* and *taijinkyofu*. *Culture, Medicine and Psychiatry*, *13*, 391–403.
- Sato, T., & Cameron, J. E. (1999). The relationship between collective self-esteem and self-construal in Japan and Canada. *The Journal of Social Psychology*, *139*, 426–435.
- Shibata, T. (1990). Effects of body-satisfaction on social anxiety and self-disclosing behavior in adolescence. *Japanese Journal of Psychology*, *61*, 123–126.
- Shiota, N. K., Krauss, S. S., & Clark, L. A. (1996). Adaptation and validation of the Japanese MMPI-2. In J. N. Butcher (Ed.), *International adaptations of the MMPI-2: Research and clinical applications* (pp. 67–87). Minneapolis: University of Minnesota Press.
- Shirakabe, Y. (1991). The development of aesthetic facial surgery in Japan: As seen through a study of Japanese pictorial art. *Aesthetic Plastic Surgery*, *14*, 215–221.
- Shohat, E., & Stam, R. (1995). *Unthinking Eurocentrism: Multiculturalism and the media*. London: Routledge.
- Silberstein, L. R., Striegel-Moore, R. H., Timko, C., & Rodin, J. (1988). Behavioral and psychological implications of body dissatisfaction: Do men and women differ? *Sex Roles*, *19*, 219–232.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, *20*, 580–591.
- Strauman, T. J., Vookles, J., Berenstein, V., Chaiken, S., & Higgins, E. T. (1991). Self-discrepancies and vulnerability to body satisfaction and disordered eating. *Journal of Personality and Social Psychology*, *61*, 946–956.
- Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford University Press.
- Tanaka-Matsumi, J. (1979). *Taijin kyôfushô*: Diagnostic and cultural issues in Japanese psychiatry. *Culture, Medicine, and Psychiatry*, *3*, 231–245.

- Triandis, H. C. (1995). *Individualism and Collectivism*. Boulder, CO: Westview Press.
- Tsubaki, K. (1975). *Nihonjin no kao* [The Japanese face]. Tokyo: Bojinsha.
- Wagatsuma, H. (1967). The social perception of skin color in Japan. *Daedalus*, 96(2), 407–443.
- Williamson, D. A. (1990). *Assessment of eating disorders*. New York: Pergamon Press.
- Williamson, D. A., Gleaves, D. H., Watkins, P. C., & Schlundt, D. G. (1993). Validation of self-ideal body size discrepancy as a measure of body dissatisfaction. *Journal of Psychopathology and Behavioral Assessment*, 15, 57–68.
- Wylie, R. C. (1979). *The self-concept: Vol. 2. Theory and research on selected topics*. Lincoln: Nebraska University Press.
- Yik, M. S. M., Bond, M. H., & Paulhus, D. L. (1998). Do Chinese self-enhance or self-efface? It's a matter of domain. *Personality and Social Psychology Bulletin*, 24, 399–406.
- Yoshida, T., Kojo, K., & Kaku, H. (1982). A study on the development of self-presentation in children. *Japanese Journal of Educational Psychology*, 30, 30–37.

APPENDIX

Physical Attributes Used in the Physical Self-Ideal Discrepancy Scale (in the Order Presented)

Facial form. Human head shapes were depicted by a series of 10 schematic drawings of heads (frontal view, without hair) adapted from Martin and Saller (1956).

Voice quality. Voice quality was rated on a 9-point scale, anchored at 1 (*very low*), 5 (*average*), and 9 (*very high*).

Hair type. Hair type (depth) was depicted by a series of 9 schematic drawings modified from Martin and Saller (1956) ranging from 1 (*very straight*) through 5 (*wavy*) to 9 (*very curly*).

Hair color. Hair color was rated on a 9-point darkness scale, anchored at 1 (*black*), 2 (*dark brown*), 3 (*brown*), 4 (*light brown*), 5 (*auburn*), 6 (*red*), 7 (*dark blond*), 8 (*blond*), and 9 (*light blond*). Participants could rate additional colors too: 10 (*gray/silver*), 11 (*white*), and 12 (*other*).

Hair length. Hair length was rated on a 9-point scale, anchored at 1 (*very short*), 5 (*fully covers the ears [less than shoulder length]*), 9 (*longer than shoulder length*).

Eye color. Eye color was rated on a 9-point darkness scale, anchored at 1 (*black*), 2 (*dark brown*), 3 (*brown*), 4 (*light brown*), 5 (*green–brown*), 6 (*green*), 7 (*dark blue*), 8 (*blue*), and 9 (*light blue*). Participants could rate additional colors: 10 (*other*).

Eye shape (eye size and eyelid size). Eye shape was depicted by a series of 25 drawings and 56 intermediary lines (total = 81 grades). These drawings, done by means of graphics software, were displayed on two dimensions: eye size and eye fold size, ranging from 1 (*very small eye and small eyelid without a fold*), 41 (*medium eye and eyelid*), and 81 (*very large eye and eyelid*). Scores were analyzed separately for each dimension on a 9-point continuum.

Eyebrow thickness. Eyebrow thickness was rated on a 9-point scale, anchored at 1 (*very thin*), 5 (*average*), and 9 (*very thick*).

Nose prominence. Nose prominence was depicted by a series of three side-view drawings of the face (in which the vertical location of the eye was manipulated relative to the nose) and six intermediary lines (total = nine grades). These drawings were displayed on one dimension ranging from 1 (*very sunken nose bridge [eyes are prominent]*) to 9 (*very prominent nose bridge [eyes are sunken]*).

Nose shape (nose length and nose angle). Nose shape was depicted by a series of 15 side-view drawings of various noses. These drawings, modified from Martin and Saller (1956), were displayed on two dimensions: nose length (five grades) and nose shape (three

grades: concave, straight, convex) ranging from 1 (*very small and concave nose*) through 8 (*medium size and straight*) to 15 (*very large and convex nose*). Scores were analyzed separately for each dimension.

Nose width. Nose width was depicted by a series of five lower view drawings of the nose and four intermediary lines (total = nine grades). These drawings, adapted from Farkas, Hreczko, and Deutsch (1983), were displayed on one dimension ranging from 1 (*very thin nose*) through 5 (*medium*) to 9 (*very wide nose*).

Mouth shape (mouth width and lips thickness). Mouth shape was depicted by a series of 25 frontal view drawings of various mouths and 56 intermediary lines (total = 81 grades). These drawings, prepared by means of graphics software, were displayed on two dimensions: mouth width and lip thickness, ranging from 1 (*very narrow mouth and thin lip size*) through 41 (*medium size mouth and lips*) to 81 (*very wide mouth and thick lips*). Scores were analyzed separately for each dimension on a 9-point continuum.

Chin and mouth shape. Lower face shape was depicted by a series of nine side-view drawings, modified from "Kuchi moto" (1989). They were displayed on one dimension ranging from 1 (*very prominent mouth receding chin*) to 9 (*very prominent chin*).

Skin color. Skin color was rated on a 9-point scale, anchored at *very dark* (1), *average* (5), and *very light* (9).

Height. Height was depicted by the difference (in cm) from one's actual height (as reported on the cover of the questionnaire along with age and sex).

Weight. Weight was depicted by the difference (in kg) from one's actual weight (as reported on the cover of the questionnaire).

Body shape. Body shape was depicted by a series of nine drawings. Female participants rated figures of women and male participants rated figures of men, adapted from Williamson (1990) and modified from Silberstein et al., (1988) respectively. The drawings were displayed on one continuum ranging from *very thin body shape* (1) to *very obese body shape* (9).

Muscularity. Muscularity was rated on a 9-point scale, anchored at *extremely not muscular* (1) to *extremely muscular* (9).

Leg shape. Leg shape was depicted by a series of three drawings adapted from Olivier (1961) and six intermediary lines (total nine grades). These drawings were displayed on one continuum ranging from *bow legs* (1) through *straight legs* (5) to *knock-kneed legs* (9).

Breast shape (women only). Breast shape was depicted by a series of five drawings and four intermediary lines (total = nine grades). These drawings, modified from Olivier (1961), were displayed on one dimension ranging from *very premature, erected breasts* (1) through *mature* (5) to *pendulous breasts* (9).

Breast size (women only). Breast size was rated on a 9-point scale, anchored at *very small* (1), *average* (5), and *very big* (9).

Facial hair density (men only). Facial hair was depicted by a series of nine drawings, modified from Tsubaki (1975). These drawings were displayed on one continuum ranging from *no facial hair* (1) through *medium size beard and mustache* (5) to *very dense beard and mustache* (9).

Body hair density (men only). Body hair was depicted by a series of nine drawings, modified from Olivier (1961). These drawings were displayed on one continuum ranging from *pubic hair only* (1) through *medium dense hair on the chest and legs* (5) to *very dense hair all over the body including the back* (9).

Sex organ size (men only). Sex organ size was rated on a 9-point scale, anchored at *very small* (1), *average* (5), and *very big* (9).

Received February 11, 2005

Accepted June 7, 2005

Copyright of Genetic, Social & General Psychology Monographs is the property of Heldref Publications. The copyright in an individual article may be maintained by the author in certain cases. Content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.

Copyright of Genetic, Social & General Psychology Monographs is the property of Heldref Publications. The copyright in an individual article may be maintained by the author in certain cases. Content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.