Examining body image discrepancies and perceived weight status in adult Japanese women

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1. Introduction

Although the prevalence of eating disorders in Japan has increased dramatically over the past three decades (e.g., Pike & Mizushima, 2005), the amount of research on eating disorders in Japan, particularly bulimia nervosa (BN), is starkly lacking. Several researchers have attempted to explain the rise in eating disorders in non-Western nations, like Japan, in terms of internalization of Western beauty ideals (e.g., Stark-Wroblewski, Yanico, & Lupe, 2005). Although this conceptualization has some explanatory power, it does not resolve important differences that have been noted in the presentation and symptomatology of eating disorders in the East and West. For example, Asians diagnosed with anorexia nervosa (AN) have less “fear of fat” and greater maturity fears as compared to their Western counterparts (e.g., Tareen, Hodes, & Rangel, 2005). Furthermore, these acculturation theories tend to ignore sociocultural factors within a given society that may be independently and/or additively contributing to the increase in eating disorders (Cummins, Simmons, & Zane, 2005). The aim of the current study was to determine whether factors that have been found to predict BN symptoms in Western samples also predicted BN symptoms in a Japanese sample, and to ascertain which body ideal, Japanese or Western, Japanese women were more likely to internalize.

Both self discrepancies and perfectionism have been found to be risk factors for the development of disordered eating. Strauman, Vookles, Berenstein, Chaiken, & Higgins (1991) found that self discrepancies predicted bulimic symptoms in a sample of female undergraduates. Moreover, body dissatisfaction is one of the most often implicated risk factors for BN and AN (e.g., Joiner, Wonderlich, Metalsky, & Schmidt, 1995). With regard to perfectionism, a meta-analytic study found support for perfectionism as a risk factor for BN (Stice, 2001). Furthermore, a recent study found that people with AN and BN had higher self-oriented perfectionism than people with other internalizing disorders, like depression and anxiety (Castro-Fornieles et al., 2007). Notably,
perfectionism and perceived overweight have been found to interact to predict disordered eating symptoms. Specifically, Joiner, Heatherton, Rudd, & Schmidt (1997) found that among women who perceived themselves to be overweight, highly perfectionistic women were more likely to have BN symptoms than women who were low on perfectionism.

Research is also beginning to show that internalization of the Japanese female beauty ideal, rather than the Western beauty ideal, may be more damaging to Japanese women’s eating attitudes and behaviors. Although both Japanese and American female ideals are young and thin, the Japanese ideal has the added dialectic of being wholesome yet sexy, playful but submissive, and is described as embodying “bone-thin skinniness, wide-eyed innocence, cuteness, and youth” (Spielvogel, 2003). Many Japanese women have come to realize that one way to look young and cute is to maintain an exceedingly thin figure through strict dieting (Kinsella, 1995).

We sought to determine which ideal, Japanese or American, participants considered to be the thinnest. We hypothesized that Japanese women would consider the Japanese female body ideal to be more slender than the American female body ideal. Moreover, we examined whether discrepancies between perceived weight and ideal weight (body image discrepancy) predicted eating disorder symptoms, particularly body dissatisfaction, drive for thinness, and bulimia. We further hypothesized that perfectionism would interact with perceived weight status to predict bulimic symptoms.

2. Methods

The sample consisted of 45 female Japanese high school teachers from 5 high schools in Ibaraki-prefecture, Japan. The participants’ ages ranged from 21 to 56 (M=37.69, SD=10.00). All procedures were approved by the investigators’ university Institutional Review Board.

First, participants completed the Stunkard Body Figure Scale (Stunkard, Sørensen, & Schulsinger, 1983). These figures illustrate body weights ranging from very thin to obese. By choosing a number corresponding to a particular silhouette, participants indicated what they perceived their current and their ideal body shape to be, what they perceived the ideal body shape of women in Japan and America to be, and what they perceived the ideal body shape for women in Japan according to Japanese men to be.

Next, using an approach that has been previously validated (i.e., Joiner et al., 1997) participants were asked to rate their perceived weight status (PWS). Participants were to classify their current weight as very underweight, underweight, average, overweight, or very overweight.

Last, participants completed the Japanese version of the Eating Disorders Inventory (EDI-2; Garner, 1991). The EDI-2 is a self-report inventory that consists of 64 questions about attitudes and behaviors related to eating disorders. The EDI-2 yields eight subscale scores: Drive for Thinness, Perfectionism, Bulimia, Body Dissatisfaction, Ineffectiveness, Interpersonal Distrust, Interoceptive Awareness, and Maturity Fears.

3. Results

First we examined for whom Japanese women thought the ideal female body shape was thinnest: Japanese women, Japanese men, or American women. Participants rated the female body ideal according to Japanese men as the thinnest (M=3.49, SD=.54), followed by the ideal according to Japanese women (M=3.53, SD=.54), and American women (M=3.88, SD=.53). Participants reported that the ideal body shape for women according to Japanese men was significantly thinner than the ideal body shape of women in America (paired t(42)=3.90, p<.01). The ideal body shape for Japanese women was also significantly thinner than the ideal body shape for American women (paired t(42)=2.54, p=.02). However, participants did not rate the ideal body shape for Japanese women as significantly different from what they reported Japanese men considered as the ideal body shape for Japanese women (paired t(42)=1.14, p=.26).

Regression analyses were used to assess the effects of body image discrepancy (BID) on symptoms of disordered eating. BID was calculated by subtracting the number corresponding to the Stunkard body image participants chose to represent their ideal body image from the number corresponding to the Stunkard body image participants chose to represent their current body image; this difference is an accepted measure of body dissatisfaction (Bulik et al., 2001). Our hypothesis that BID would predict drive for thinness and bulimic symptoms was supported: drive for thinness (B=-2.31, 95% CI=[-3.7,-.93], t(44)=-3.37, p=.002), bulimic symptoms (B=-1.80, 95% CI=[-3.04,-.57], t(44)=-2.94, p=.005). However, BID was not a significant predictor of any of the other six subscales of the EDI.

We conducted a hierarchical regression analysis to determine whether there was an interaction between perfectionism (as measured by the EDI Perfectionism subscale) and perceived weight status (PWS; indicated by participants’ classification of their current weight) to predict bulimic symptomology (as measured by the EDI Bulimia subscale). Results indicated that the interaction term accounted for an additional 12% of the variance (R^2 change=.12, p=.017, f^2=.14). To further examine the interaction between PWS and perfectionism, we tested the simple effect of perfectionism at high and low levels of weight status (one standard deviation above and below the mean). Only among participants high on PWS (i.e., perceived themselves to be overweight) did perfectionism predict greater bulimic symptomology (B=.56, 95% CI=[.14,.97], t(38)=2.50, p=.017).

4. Discussion

This research adds to a growing body of literature that questions the importance of the Western beauty ideal in the development of eating disorders in certain cultures. Participants reported that the Japanese female body ideal was thinner than the
American female body ideal, and they also reported that they believed Japanese men preferred an even thinner female body. Thus, it may be misleading to explain the rising rate of eating disorders in Japan simply as a result of “Westernization.”

Although Japanese women seem to prefer a slimmer body ideal than they believe their Western counterparts do, there were important similarities between this and previous studies conducted in the West. Specifically, perceived overweight status was found to interact with perfectionism to predict bulimic symptoms. Given that perfectionism is a highly valued trait in Japanese society (e.g., Sumi & Kanda, 2002), Japanese women who perceive themselves to be overweight could be at an increased risk for developing an eating disorder.

Several limitations of the study should be noted. First, the small sample could have resulted in low power (though we detected many effects that were both predicted and significant) and Type II error. Relatedly, the sample consisted of non-clinical women, so the observed results may not generalize to clinical samples. Third, there was no comparison group for this study, as it is primarily an exploratory and descriptive study. Future research should look at differences between a similarly aged group of professional Western women.

Despite noted differences in the presentation of eating disorders in certain Eastern and Western countries (e.g., see Tareen et al., 2005), there appear to be important similarities, such as those highlighted in the current paper. Thus, it may be that although cultural factors exert an influence on the topographic presentation of eating disorders, there are similar underlying personality factors between various cultures. It is important that future research continues to investigate these similarities and differences, so that through this exploration we can attempt to uncover broader processes of change that will inform a culturally sensitive theory of the development and treatment of eating disorders.

References


