

Effect of Western Culture on Women's Attitudes to Eating and Perceptions of Body Shape

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Abstract: Objective: *The current study investigated the effect of culture on two factors implicated in the development of eating disorders, negative attitudes toward eating and dissatisfaction with body shape. Method:* Hong Kong-born and Australian-born women from two Australian universities were surveyed using the Eating Attitudes Test (EAT) and the Figure Rating Scale (FRS). **Results:** *Results showed no difference between the groups in eating attitudes, but significant differences in body shape perceptions, with the Australian-born reporting greater dissatisfaction. Hong Kong-born subjects were separated into two groups based on their level of Chinese identity (Western acculturized and traditional). Their EAT and FRS scores were compared to the Australian-born, with Western acculturized Hong Kong-born subjects reporting significantly lower EAT and FRS scores than the Australian-born, whereas the more traditional Hong Kong-born subjects reported equivalent scores. Discussion:* *Main implications center around the need for a cross-culturally sensitive definition of eating disorders, the effect of level of ethnic identity on eating attitudes and body image, and the importance of developing culturally appropriate measures. © 2000 by John Wiley & Sons, Inc. Int J Eat Disord 27: 83–89, 2000.*

Key words: *eating attitudes; culture; body shape perceptions; ethnic identity*

INTRODUCTION

Western society has been criticized for its emphasis on a slim physique and negative stereotyping of obese figures. It has been proposed that this has resulted in mass dissatisfaction with body shape and weight concerns among the female population (Tiggeman & Rothblum, 1988). This dissatisfaction has been argued to lead to negative attitudes toward eating, a preoccupation with weight and dieting, and the pervasiveness of eating disorders in Western society (Powell & Kahn, 1995).

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The incidence of eating disorders has been shown to increase in non-Western women entering Western society (see Dolan, 1991, for a review). Explanations come from two opposing viewpoints. The first attributes an increase in maladaptive eating patterns to a culture clash experienced by individuals who migrate to a new country, due to the pressure to adapt to a new culture. Literature reports that more traditional females (i.e., those having a stronger identity with their country of birth) are at a higher risk of developing eating disorders due to the difficulties experienced in growing up with two sets of cultural values (Ahmad, Waller & Verduyn, 1994; McCourt & Waller, 1995). The alternative cultural assimilation argument suggests that the incidence of eating disorders increases in women from non-Western cultures when they move to a Western society and assimilate the host society norms and values, including those relating to the ideal female body shape. In this respect, there is literature indicating that non-Western women who have assimilated Western norms and values are at a higher risk of developing eating disorders (Akan & Grilo, 1995; Furnham & Alibhai, 1983; Mumford & Whitehouse, 1988). One of the aims of this study is to further examine how eating attitudes and body image are affected by the level of ethnic identity in Hong Kong-born women (i.e., traditional vs. Western acculturized). A further area of interest is that of the culturally sensitive diagnostic instruments used in diagnosis and assessment of eating disorders, primarily the 4th ed. of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association [APA], 1994).

DSM-IV states that a disturbance in perception of body shape is an essential feature of eating disorders. However, it does make reference to the fact that in non-Western patients, disturbed perception of body image may not be prominent and the expressed motivation for food restriction may not be to lose weight. Research investigating dissatisfaction with body shape in non-Western society has supported this suggestion and found that abdominal discomfort and gastric bloating were commonly cited reasons for food restriction (Lee, Chiu, & Chen, 1989). These authors note that this characteristic may be undetectable or absent in Hong Kong anorexic patients, suggesting that the DSM-IV requirement that subjects justify their diminished food intake is culturally constructed and should be deleted from DSM-IV criteria.

Previous cross-cultural research on Hong Kong-born subjects has been limited, the majority of which involved second-generation immigrants who would have been influenced by Western norms and values from an early age (Rosenthal & Feldman, 1990). Lee (1993), in a survey of Chinese-born undergraduates in Hong Kong, argued that young Chinese women shared a similar ideal of slimness as their Western counterparts, but dieting and eating disorders remained rare. Studies that focus on Chinese women residing in their host culture raise the question: Is the prevailing biomedical definition, by assigning primacy to fat phobia and distortion of body image, culturally constructed?

Using a nonclinical population of Australian-born and Hong Kong-born University students currently residing in Australia, the present study aims to study the effect of cultural influences on the development of negative attitudes toward eating and dissatisfaction with body image, both of which have been shown in the literature to be associated with the development of eating disorders (see Altabe & Thompson, 1992). By focusing on Hong Kong-born women living in a Western society, the research will allow attitudinal differences in subjects who have had direct contact with two cultures to be measured. Level of ethnic identity (traditional vs. Western acculturized) was measured by the Ethnic Identity Scale (EIS; Rosenthal & Feldman, 1992). The authors of the scale considered that weak ethnic identity reflected assimilation with the host society.

METHOD

Subjects

A total sample of 140 female students from two Australian Universities participated in the study. The sample was divided into two groups. The first group comprised 101 first-year Bachelor of Psychology students. Three questionnaires were rejected because either the subject was not born in Australia or did not fully complete the tests, leaving a total of 98 for evaluation. All subjects in this group were born in Australia, with a mean age of 20.13 years ($SD = 4.32$), ranging from 17 to 42 years.

The second group comprised 43 University students who were born in Hong Kong with a mean age of 23.24 ($SD = 5.30$), ranging from 17 to 43 years. One questionnaire was rejected due to incomplete answers, leaving a total of 42 for evaluation. The Hong Kong-born subjects were divided into two subgroups. The first subgroup consisted of 22 females with low EIS scores (weak Chinese ethnic identity or Western acculturized), with scores on the EIS ranging from 55 to 74. The second subgroup consisted of 20 females with high EIS scores (strong Chinese ethnic identity or Traditional), with scores ranging from 75 to 101.

Design

The study was cross-sectional in design, involving two groups of students (Australian-born and Hong Kong-born women) who were compared on two dependent variables, attitudes to eating and perception of body shape. The Hong Kong-born sample was further divided on the basis of level of ethnic identity.

Procedure

Subjects were informed that the survey was being conducted to learn more about what factors contributed to eating disorders. Participation was voluntary, with each subject completing the Eating Attitudes Test (EAT), the Figure Rating Scale (FRS), and a demographics questionnaire. In addition, Hong Kong-born subjects completed the EIS.

Measures

The EAT

The EAT assesses a broad range of symptoms of anorexia nervosa and bulimia nervosa. Questions on the EAT range in possible scores from 0 to 78, with the clinical cut-off point being 20 (higher scores reflect more disordered eating attitudes). Respondents rate the frequency of each item on a 6-point scale from Always (1) to Never (6). The EAT is commonly used and is well validated (Garner & Garfinkel, 1979; Garner, Olmsted, Bohr, & Garfinkel, 1982).

The FRS

The FRS consists of a continuum of nine female silhouettes, ranging from extremely thin (1) to obese (9). The subjects were requested to nominate the body shape that would be their ideal body size (Ideal) and to nominate the body shape that represents their current body size (Current). The FRS score was calculated as the discrepancy between the two

body images (i.e., Current – Ideal). A score of 4 on the FRS represented no discrepancy in perception of body image (i.e., Current = Ideal); scores ranging from 0 to 3 represented a positive move from current to ideal body figure preference (i.e., the subject would like to be larger); and scores ranging from 5 to 8 represented a negative move from current to ideal body figure preference (i.e., the subject would like to be thinner). The FRS has been commonly used in similar research and appears well validated, with high test-retest reliability (see Thompson & Altabe, 1991).

The EIS

Assessment of cultural orientation for the Hong Kong-born subjects was measured with the EIS. Scores range from 8 to 121, with cut-off determined by median-split as recommended by the author of the scale (D. Rosenthal, personal communication August, 1996).

Statistical Analyses

Although the EAT and FRS rating scales provide numerical scores, one cannot assume that the values correspond to equal increments in the attitudes being measured. Hence, The Mann-Whitney U Test was chosen as the most appropriate method of data analysis to detect possible significant differences between the means of the groups under study (Zhu, 1996).

RESULTS

Eating Attitudes

Between-group EAT scores (Australian-born vs. Hong Kong-born) were compared and showed that the differences in the means were not significant ($Z = -1.397, p > .05$). However, when the Hong Kong-born sample EAT scores were tested for within-group differences based on level of ethnic identity, it was found that the difference in the means was significant ($Z = -2.473, p < .05$). Table 1 presents EAT scores for each of the groups. The traditional Hong Kong-born subjects reported significantly higher EAT scores than the acculturized Hong Kong-born subjects, indicating more negative eating attitudes than the acculturized Hong Kong-born sample. In addition, when both groups of Hong Kong-born subjects were compared to the Australian-born sample, the traditional Hong Kong-born women mean EAT scores were not significantly different to the Australian-born women ($Z = -.612, p > .05$), while the acculturized Hong Kong-born women's scores were significantly lower than those of the Australian-born women ($Z = 2.662, p < .01$).

Table 1. Summary statistics, mean, *SD*, *Z*, and *p* values for EAT scores of Hong Kong-born (acculturized and traditional) when compared to Australian-born subjects

Ethnic Identity	<i>N</i>	EAT Range	Mean EAT	<i>SD</i>	<i>Z</i>	<i>p</i>
Acculturized Hong Kong-born	22	0–20	4.77	5.53	-2.662	.007*
Traditional Hong Kong-born	20	0–39	11.90	12.39	-.612	.540
Total Australian-born	98	0–59	9.56	11.09		

Note: EAT = Eating Attitudes Test.

* $p < .01$.

Body Figure Perceptions

Between-group FRS scores (Australian-born vs. Hong Kong-born) were compared. They showed that the differences in the means were significant ($Z = -2.887, p < .01$), with the FRS scores for the Australian-born subjects significantly higher than their Hong Kong-born counterparts, thereby reporting greater dissatisfaction with perception of body image. A within-group comparison of the FRS scores for the two groups of Hong Kong-born subjects showed that the differences in the means were not significant ($Z = -1.899, p > .05$). Table 2 shows that when both groups of Hong Kong-born subjects were compared to the Australian-born sample, the FRS scores of the traditional Hong Kong-born women were not significantly different to the Australian-born women ($Z = -1.085, p > .05$), while the acculturized Hong Kong-born women's scores were significantly lower than the Australian-born women ($Z = -3.288, p < .01$).

DISCUSSION

Results reveal a significant difference between the Australian and the overall Hong Kong-born group on body image, but no significant difference on attitudes to eating. However, when the Hong Kong-born sample was divided into traditional and acculturized groups on the strength of ethnic identity, the only difference on both measures lies between the acculturized and the Australian-born sample. The traditional Hong Kong-born women revealed similar body image perceptions and eating attitudes to the Australian-born women.

The finding in relation to the traditional Hong Kong-born women lends support to the culture clash argument, which suggests that the traditional group has been more influenced by Western values than the acculturized group. Explanations supporting the cultural clash phenomenon focus on the intrafamilial conflict experienced by females of Asian origin when their attempts to emulate the relative independence of their Western peers is contradicted by the cultural, religious, and gender-based norms and values held by their families (McCourt & Waller, 1995). Interestingly, these results indicate that Hong Kong-born subjects who are influenced by Western values have been less affected by Western attitudes toward eating and body image than those who were more traditional with respect to their Chinese identity. Further research is required to focus on the specific factors involved in this phenomenon.

Hong-Kong born women reported minimal body dissatisfaction compared to their Australian-born counterparts. This finding may have implications for the classification of eating disorders according to the DSM-IV criterion which regards disturbance of percep-

Table 2. Summary statistics, mean, *SD*, *Z*, and *p* values for FRS scores of Hong Kong-born (acculturized and traditional) when compared to Australian-born subjects

Ethnic Identity	<i>N</i>	FRS Range	Mean FRS	<i>SD</i>	<i>Z</i>	<i>p</i>
Acculturized Hong Kong-born	22	3-6	4.18	.85	-3.288	.001*
Traditional Hong Kong-born	20	4-8	4.80	1.00	-1.085	.277
Total Australian-born	98	2-7	4.88	.92		

Note: FRS = Figure Rating Scale.

* $p < .05$.

tion of body image as an “essential characteristic of anorexia nervosa and bulimia nervosa” (APA 1994, pp. 539). Our findings are consistent with those of Lee (1993) and suggest the need to modify the diagnostic criteria of eating disorders to accommodate its culture-specific manifestations. Lee (1995) has argued that there should be more flexible criteria for eating disorders, in particular an inclusion in DSM-IV of other reasons for refusal of food rather than just fear of fatness. These discussions emphasize the importance of ensuring that DSM criteria do not exclusively refer to Western cultural phenomenon in its classifications.

It is important to comment on the fact that the Australian-born female group reported greater body image distortion than the Hong Kong-born women, yet there were no significant differences between the groups in their attitudes to eating. As discussed above, a possible explanation for this is that body image may not be a crucial factor contributing to eating disorders in Hong Kong-born women. An explanation for the nonsignificant difference in eating attitudes (EAT scores) could be that there is no global cultural difference between the two groups on this measure or alternatively the measure used may not be useful in detecting cultural differences, thus bringing into question the cross-cultural validity of the scale. A number of authors have criticized the cross-cultural usage of the EAT, citing methodological concerns that the use of Western questionnaires on non-Western populations may encounter an unwillingness to report any linguistic barriers, leaving the questions open for misinterpretation (King & Bhugra, 1989). In this respect, attention must be paid both to the cultural relevance of diagnostic systems and also to the questionnaires relating to eating disorders.

In summary, the aim of this study was to investigate the influence of culturally mediated factors on eating attitudes and perception of body shape. The results support existing literature that attitudes toward eating and perceptions of one’s own body shape are influenced by cultural factors (Furnham & Baguma, 1994; Hill & Bhatti, 1995). The results suggest that, in general, the Hong Kong-born subjects have not embraced Western body figure preferences, although it seems that the effects of cultural conflict have elevated traditional Hong Kong-born subjects scores above those of the Western acculturized Hong Kong-born subjects to a significant extent. The current research has highlighted the need for more cross-culturally sensitive definitions of eating disorders and the consequences that this may have for the development of culturally appropriate scales and for the subsequent diagnosis and treatment of eating-disordered patients from non-Western cultures currently residing in Western society.

REFERENCES

- Ahmad, S., Waller, G., & Verduyn, C. (1994). Eating attitudes among Asian schoolgirls: The role of perceived parental control. *International Journal of Eating Disorders*, 15, 91–97.
- Akan, G.E., & Grilo, C.M. (1995). Sociocultural influences on eating attitudes and behaviours, body image and psychological functioning: A comparison of African-American, Asian-American, and Caucasian college women. *International Journal of Eating Disorders*, 18, 181–187.
- Altabe, M., & Thompson, J.K. (1992). Size estimation versus figural ratings of body image disturbance: Relation to body dissatisfaction and eating dysfunction. *International Journal of Eating Disorders*, 11, 397–402.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Dolan, B. (1991). Cross-cultural aspects of anorexia nervosa and bulimia: A review. *International Journal of Eating Disorders*, 10, 67–78.
- Furnham, A., & Alibhai, N. (1983). Cross-cultural differences in the perception of female body shapes. *Psychological Medicine*, 13, 829–837.

- Furnham, A., & Baguma, P. (1994). Cross-cultural differences in the evaluation of male and female body shapes. *International Journal of Eating Disorders*, 15, 81–89.
- Garner, D.M., & Garfinkel, P.E. (1979). The Eating Attitudes Test: An index of the symptoms of anorexia nervosa. *Psychological Medicine*, 9, 273–279.
- Garner, D.M., Olmsted, M.P., Bohr, Y., & Garfinkel, P.E. (1982). The Eating Attitudes Test: Psychometric features and clinical correlates. *Psychological Medicine*, 12, 871–878.
- Hill, A.J., & Bhatti, R. (1995). Body shape perception and dieting in preadolescent British Asian girls: Links with eating disorders. *International Journal of Eating Disorders*, 17, 175–183.
- King, M.B., & Bhugra, D. (1989). Eating disorders: Lessons from a cross-cultural study. *Psychological Medicine*, 19, 955–958.
- Lee, S. (1993). How abnormal is the desire for slimness? A survey of eating attitudes and behaviour among Chinese undergraduates in Hong Kong. *Psychological Medicine*, 23, 437–451.
- Lee, S. (1995). Self-starvation in context: Towards a culturally sensitive understanding of anorexia nervosa. *Social Science and Medicine*, 41, 25–36.
- Lee, S., Chiu, H.F.K., & Chen, C. (1989). Anorexia nervosa in Hong Kong: Why not more in Chinese? *British Journal of Psychiatry*, 154, 683–688.
- McCourt, J., & Waller, G. (1995). Developmental role of perceived parental control in the eating psychopathology of Asian and Caucasian schoolgirls. *International Journal of Eating Disorders*, 17, 277–282.
- Mumford, D.M., & Whitehouse, A.M. (1988). Increased prevalence of bulimia nervosa among Asian schoolgirls. *British Medical Journal*, 297, 718.
- Powell, A.D., & Kahn, A.S. (1995). Racial differences in women's desires to be thin. *International Journal of Eating Disorders*, 17, 191–195.
- Rosenthal, D.A., & Feldman, S.S. (1990). The acculturation of Chinese immigrants: Perceived effects on family functioning of length of residence in two cultural contexts. *Journal of Genetic Psychology*, 154, 495–514.
- Rosenthal, D.A., & Feldman, S.S. (1992). The nature and stability of ethnic identity in Chinese youth. *Journal of Cross-Cultural Psychology*, 23, 214–227.
- Thompson, J.K., & Altabe, M.N. (1991). Psychometric qualities of the figure rating scale. *International Journal of Eating Disorders*, 10, 615–619.
- Tiggeman, M., & Rothblum, E.D. (1988). Gender differences in social consequences of perceived overweight in the United States and Australia. *Sex Roles*, 18, 75–86.
- Zhu, W. (1996). Should total scores from a rating scale be used directly? *Research Quarterly for Exercise and Sport*, 67, 363–372.