

Perfection as acculturation: A study of the psychological correlates of eating problems in Chinese male and female students living in the United States

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RUNNING HEAD: ACCULTURATION AND EATING DISORDERS

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Abstract

Objective: The purpose of this study was to assess the relationship between acculturation, self-esteem, depression, and characteristics associated with eating disorders among Chinese university students in the USA. **Method:** A self report questionnaire which included an acculturation scale (SL-ASIA), Center for Epidemiologic Studies of Depression (CES-D), Index of Self Esteem (ISE) and Eating Disorder Inventory (EDI) was administered to 197 Chinese university students in the USA (93 females and 104 males). **Results:** Highly acculturated females reported significantly higher EDI total scores, more maturity fears and a greater sense of ineffectiveness. Males who were less acculturated also reported high ineffectiveness while high male scores on acculturation were associated with greater perfectionism. Overall, females reported more body dissatisfaction and drive for thinness, and respondents with high acculturation reported more perfectionism and interceptive awareness. **Discussion:** The impact of perfecting oneself or ones body as a means of acculturating is discussed along with potential gender differences in perceived efficacy in a new culture.

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The presence of attitudes and behaviors associated with disordered eating has increasingly been invoked as a marker of adaptation or acculturation for individuals, particularly those from eastern backgrounds, exposed to shifting cultural images in their home country or those emigrating to new nations (Katzman & Lee, in press; Lee, 1995). However who is included in studies of eastern women and what is measures has varied a great deal across investigations. In general, research on Asian women has focused on women recently immigrated into a western culture (e.g. Furnham & Alibhai, 1983), women exposed to western values in their home country (e.g. Mumford, Whitehouse & Choudry, 1992), or women from the Indian sub-continent (e.g. McCourt & Waller, 1996). Few studies have examined Chinese women exposed to Western values (Katzman et al., 1996) and even less have studied Chinese women in the USA (Davis & Katzman, in press b; Root, 1990).

Equally problematic is the implicit assumption in the existing literature that westernization is interchangeable with acculturation. Only one study to date has actually attempted to quantify the adaptation of western behaviors in Chinese subjects (Katzman & Leung, 1996) and only one has looked directly at the impact of acculturation on Asian (in this case Japanese) students living in the USA (Furukawa, 1994). There is a notable absence of studies which have empirically examined the impact of acclimation on attitudes and behaviors associated with eating disorders for Chinese living in the USA (Davis & Yager, 1992).

By definition, acculturation is the process by which one group asserts its influence over another and what happens is likely to be difficult, reactive, and conflictual; affecting ones physical as well as psychological functioning (Berry, 1980). The immigration of Asian groups into the USA is unique in that the majority of Asian immigration is relatively recent (Kitano, 1991). The present influx of Asian immigrants in general combined with the

possibility for an increase in Hong Kong (HK) Chinese as the territory returns to Chinese rule this year, suggests that the study of acculturation and psychological functioning among this ethnic group is of vital importance.

The purpose of the current study therefore was to assess psychological functioning as well as prodromal eating disordered attitudes in a sample of Chinese students living in the USA and to determine whether the degree of acculturation impacted these variables. Such a study would provide important information in developing prevention as well as intervention programs for a growing sector of American society.

Method

Procedures & Measures: A self-report questionnaire was administered to Chinese students from HK Student Associations at five state universities throughout California. All respondents voluntarily and anonymously participated in the study. The self report questionnaire included demographic data (e.g., height, weight), Eating Disorder Inventory (EDI: Garner, Olmsted & Garfinkel, 1983), Center for Epidemiologic Studies of Depression (CES-D: Radloff, 1977), Index of Self Esteem (ISE: Hudson, 1982), and Suinn-Lew Acculturation Scale (SL-ASIA: Suinn et al., 1987).

Participants: The participants were 197 single, undergraduate Chinese students in the USA (93 females and 104 males) between 17 to 28 years of age ($M = 20.51$ $SD = 2.14$). Females reported a body mass index (BMI) of 19.56 and an ideal body mass index (IBMI) of 18.77 ($t = 4.39$, $p < .001$). Males reported a BMI of 21.47 and an IBMI of 21.55 ($t = -.37$). Nearly 90% of participants were born in HK and less than 10% were born in the USA or Canada. Over half (53%) of the participants resided in the USA for less than 5 years, 36% 5 - 10 years, and 12% for over 10 years. There was no gender difference in level of acculturation ($p > .05$).

Results

Pearson correlations were conducted to assess the relationship among acculturation, self-esteem, depression and eating disorder characteristics for males and females. Findings revealed that for females higher acculturation was associated with higher EDI total scores ($r=.32, p<.01$), bulimia ($r=.24, p<.05$), drive for thinness ($r=.25, p<.05$), interceptive awareness ($r=.26, p<.05$), and maturity fears ($r=.24, p<.05$); however, for males higher acculturation was only associated with higher perfectionism ($r=.23, p<.05$).

Effects of acculturation were assessed by dividing respondents into high acculturation (i.e., those scoring ‘bicultural or mostly American’ on SL-ASIA) and low acculturation (i.e., those scoring ‘very or mostly Asian’ on SL-ASIA). No respondent scored a five on the SL-ASIA indicating ‘very or exclusively American’. A series of 2 (gender: male, female) x 2 (acculturation: high, low) analysis of variance were conducted to determine the effects of gender and acculturation on self-esteem, depression, and eating disorders characteristics (see Table 1). Findings revealed significant interaction effects with highly acculturated females reporting significantly greater EDI total scores [$F(1,177) = 6.19, p<.01$] and more maturity fears [$F(1,178) = 8.20, p<.01$] than females with low acculturation or males. In addition, highly acculturated females and low acculturated males reported a greater sense of ineffectiveness [$F(1,177) = 5.39, p<.05$].

Insert table 1 about here

Findings also revealed main effects of both gender and acculturation. Females were found to have higher EDI total scores [$F(1,177) = 6.82, p<.01$], body dissatisfaction [$F(1,178) = 6.68, p<.01$], drive for thinness [$F(1,178) = 8.80, p<.01$], and maturity fears [$F(1,178) = 9.89, p<.01$] when compared to males. Respondents with high acculturation were found to have higher EDI total scores [$F(1,177) = 6.34, p<.01$], more perfectionism

[$F(1,178) = 13.50, p < .001$] and interceptive awareness [$F(1,178) = 3.86, p < .05$] than respondents with low acculturation.

Discussion

In the current study there was no gender difference on acculturation scores, yet the relationship between degree of acculturation and eating disorder characteristics differed for male and female Chinese students. For females, increased acculturation was associated with greater reports of bulimia, drive for thinness, interceptive awareness, maturity fears and total EDI scores. For men, higher acculturation scores were associated with greater perfectionism while those with low acculturation scores reported feeling significantly more ineffective. Overall, females reported significantly more body dissatisfaction and drive for thinness. It is quite interesting that depression and self esteem were not impacted by degree of acculturation.

The finding that highly acculturated students reported greater perfectionism supports Root's (1990) suggestion that in an effort to assimilate immigrants may 'overcorrect' real or imagined deficits. For women the effort to perfect oneself may become focused on altering their body. Given that most of the women reported bodily dissatisfaction and a drive for thinness (despite relatively low BMI's), it is perhaps not surprising that as one acculturates the potential for eating disordered behavior increases. The greater fear of maturity and sense of ineffectiveness reported by more acculturated women is consistent with hypotheses about the difficulties of coming of age while living potentially 'between cultures' (Katzman & Lee, in press). The scores of this sample were similar to those found among highly westernized high school girls residing in HK (Katzman & Leung, 1996).

The focus on bodily perfectionism, an ultimately unobtainable goal may further propel a sense of ineffectiveness rather than ameliorate it. Kaw (1993) reports that requests for cosmetic surgery come from a disproportionate number of women wanting to "change conventional markers of racial identity". While it might be tempting to consider this merely

an aesthetic preoccupation, the literature suggests that it reflects deeper experiences of oppression and racism (Thompson, 1994).

Both highly acculturated men and women reported greater perfectionism however it was the more acculturated female and the less acculturated male that felt ineffective. This may reflect a gender difference in how a Chinese individual experiences a sense of competence in American society. These differences may range from the ease with which one engages a mate to the ways in which one's social or economic success is determined.

The current study did not reveal the potential processes contributing to Chinese males sense of ineffectiveness or efforts at perfectionism. This may be due to the choice of variables to be measured, the sensitivity of the instruments or the means of assessment. Uba (1994) reports that Asian American men report less problems than even Euro-American males which suggests that while the difficulties may not have been fully identified one should not assume that they are not present.

Previous studies revealed that Chinese women in HK were more depressed than their male counterparts (Davis & Katzman, in press a) and that Chinese women in HK related more negative views of themselves, their bodies, and their mood when compared to Chinese women in the USA (Davis & Katzman, in press b). The women in the current study, while less depressed than Chinese women in HK, are more depressed than other Chinese American samples (Kuo, 1984) with the less acculturated females fairsing the best. It is unclear whether this is because they have newly immigrated and are basking in the initial glow of change or whether maintaining a strong cultural allegiance no mater the length of time in a host country may somehow act as a protective factor.

There are several limitations to the preset study. Tiller et al. (1997) have reported that bulimic individuals have fewer social supports. The participants in this study, drawn from HK student organizations, may not be representative of other Chinese immigrants in terms of not only their access to social supports but their degree of ethnic pride. In addition

given that they are HK Chinese some of the cultural 'shocks' one would anticipate when moving to the west may not occur as HK is a very modern city. The ability to attend university may also set participants apart from other Chinese immigrant groups.

Future studies positing questions of assimilation should include not only measures of acculturation but values as well. It will be important to consider the differences between Chinese immigrants from the China, HK and Taiwan as well as to compare these findings to other acculturating groups (e.g. McCourt & Waller, 1996). Future studies would also benefit from a more longitudinal approach examining the mediating role of social support and the development of group identity as a means of protecting mood and self esteem and as a counter balance to the harmful pursuit of unachievable ideals in acculturating people.

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Table 1: Means and standard deviations for self-esteem, depression and eating disorder characteristics by gender and level of acculturation.

	Low Acculturation		High Acculturation		F-value
	Males (N=50)	Females (N=45)	Males (N=47)	Females (N=37)	
ISE	46.84 (12.16)	43.78 (10.35)	44.30 (13.05)	42.11 (11.64)	a=2.16 b=1.39 c=.06
CESD	18.06 (9.19)	18.28 (9.80)	16.38 (8.45)	20.81 (10.28)	a=2.61 b=.09 c=2.15
EDI	42.30 (16.49)	42.64 (15.70)	42.38 (23.24)	56.47 (16.22)	a=6.82** b=6.34** c=6.19**
BD	7.32 (4.21)	9.13 (4.62)	8.19 (4.68)	9.92 (4.75)	a=6.68** b=1.46 c=.00
DT	2.80 (3.44)	3.49 (3.22)	2.47 (3.42)	4.97 (4.30)	a=8.80** b=1.15 c=2.85
BL	1.62 (2.20)	1.31 (1.99)	1.91 (3.68)	1.86 (2.31)	a=.20 b=1.13 c=.11
P	3.98 (4.02)	4.53 (4.30)	6.06 (4.11)	7.00 (4.01)	a=1.45 b=13.50*** c=.10
MF	8.50 (4.59)	8.69 (4.12)	7.32 (4.85)	11.35 (4.16)	a=9.89** b=1.22 c=8.20**
IA	3.62 (2.81)	3.60 (2.93)	3.89 (4.80)	5.59 (4.55)	a=2.12 b=3.86* c=2.22
ID	6.98 (4.70)	5.64 (4.64)	7.06 (4.50)	7.00 (4.45)	a=1.03 b=1.09 c=.85
I	7.48 (5.17)	6.24 (4.13)	5.47 (5.54)	7.72 (4.88)	a=.46 b=.13 c=5.39*

Note: Low acculturation was defined as “very or mostly Asian” on SL-ASIA. High acculturation was defined as “bicultural or mostly American” on SL-ASIA. ISE=self-esteem scale, CESD=depression scale, EDI=eating disorders inventory, DT=drive for thinness, B=bulimia, BD=body dissatisfaction, I=ineffectiveness, P=perfectionism, ID=interpersonal distrust, IA=interceptive awareness, MF=maturity fears, a = main effect of gender; b = main effect of acculturation; c = interaction effect of gender x acculturation. *** p<.001; ** p<.01; * p<.05.