Ethnicity as a Protective Factor against Internalization of a Thin Ideal and Body Dissatisfaction

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ABSTRACT

Objective: We examined the potential for ethnicity to moderate the relationships between awareness and internalization of sociocultural ideals of appearance and between internalization and body dissatisfaction.

Method: Spanish (n=100), Mexican American (n=100), and European American (n=100) female participants completed measures of sociocultural attitudes and body dissatisfaction. Path analysis using maximum likelihood with robust standard errors tested the relationships across and within ethnic groups.

Results: There was evidence for the mediational effect of internalization on the relationship between awareness and

body dissatisfaction. Furthermore, both relationships were significantly stronger for European American women than for Mexican American or Spanish women (the predicted moderator effect).

Discussion: Results demonstrate how ethnicity may protect against the development of eating disorder symptoms and suggest that eating disorder prevention should involve denouncing the thin ideal, minimizing appearance as an indicator of value, and emphasizing traits other than appearance as determinants of worth. © 2005 by Wiley Periodicals, Inc.

Keywords: ethnicity; thin ideal; body dissatisfaction; eating disorders

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Introduction

Body dissatisfaction is one of the most well-established, empirically supported risk factors for the development of eating disorders. Defined as a negative subjective evaluation of one's physical appearance, body dissatisfaction has been found to predict dieting, binge eating, purging, excessive laxative use, and cessation of all eating (e.g., Attie & Brooks-Gunn, 1989; Stice, Mazotti, Krebs, & Martin, 1998). It is prevalent in both eating-disordered and nonclinical females to the degree that a moderate amount of body dissatisfaction is considered normative among women (Rodin, Silberstein, & Striegel-Moore, 1984). For example, rates as high as 80% have been reported in female college samples (Silberstein, Striegel-Moore, Timko, & Rodin, 1988).

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Given the prevalence and potential consequences of body dissatisfaction, researchers have tried to identify factors that influence its development. Sociocultural theorists contend that Western cultural values occupy a principal role in the etiology of eating disorders and their concomitants, such as body dissatisfaction. Culture is generally conceptualized as "the belief systems and value orientations that influence customs, norms, practices, and social institutions, including psychological processes (language, caretaking practices, media, educational systems) and organizations (media, educational systems)" (American Psychological Association, 2003, p. 380). Western culture (or European American/White culture), broadly refers to first-world, economically stable cultures, such as the majority culture in the United States, that value individualism, competition, rational thinking, economic displays of status and power, a patriarchal family structure, and a thin female physique (Katz, 1985).

For women, Western cultural values stipulate that appearance is central to one's value and role in society, a thin body is ideal, and thinness assures success and life satisfaction (Rodin et al., 1984; Stice, 1994). An ultrathin body is presented as normative and attainable for women. Theoretically, Western values predispose women to be dissatisfied with their bodies through a process of social comparison whereby women compare themselves to the socially esteemed female ideal and, because few (if any)

attain this ideal, deem themselves as failing to meet cultural expectations. Empiric research supports this theory. A meta-analysis of 25 experimental studies that examined the effect of viewing thinness-idealizing media on women's body image found participants were significantly more dissatisfied with their bodies after viewing thin models than after viewing average-sized models, plus-sized models, or inanimate objects (overall effect size, d=-.31; Groesz, Levine, & Murnen, 2002).

Sociocultural Model: Awareness, Internalization, and Body Dissatisfaction

One way to assess the influence of Western cultural values on the development of body dissatisfaction is to measure the extent to which an individual (a) is aware of the importance placed on appearance and thinness in Western culture and (b) internalizes these values by endorsing and desiring to emulate appearance-related social standards (Cusumano & Thompson, 1997). According to one aspect of the sociocultural model proposed by Stice (1994), internalization of the societal physical ideal mediates the relationship between awareness of cultural pressure to be thin and body dissatisfaction. Multiple studies have supported this model (e.g., Fingeret & Gleaves, 2004; Stice, 2002; Stice, Shaw, & Nemeroff, 1998; Twamley & Davis, 1999).

If internalization of Western ideals and awareness of social pressure to be thin are pivotal in the development of eating disorders, as the sociocultural model suggests, one preventive goal may be to identify factors (e.g., peer socialization, family dynamics, self-esteem, personality traits) that can protect against such internalization (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). That is, are there moderators of the relationship between awareness and internalization or between internalization and body dissatisfaction? Researchers have indeed begun testing for moderators of these relationships. Twamley and Davis (1999) found that high nonconformity and low family pressure to diet weakened the relationship between awareness and internalization. Fingeret, Lee, and Gleaves (2002) found that high levels of self-deceptive enhancement and low levels of past family emphasis on weight control weakened the relationship between awareness and internalization. Low et al. (2003) found high body mass index (BMI = kg/m^2) strengthened the relationship between internalization and body dissatisfaction. Other factors initially hypothesized as potentially providing protective influences, such as a strong feminist ideology, have produced insignificant or mixed results (e.g., Fingeret & Gleaves, 2004; Twamley & Davis, 1999).

Protective Factors: Non-Western Culture and Ethnicity

To appropriately evaluate sociocultural influences on eating disorders, researchers must determine whether diverse ethnic groups with distinct value orientations and physical ideals display different prevalence rates, etiologies, and manifestations of unhealthy eating (Altabe, 1996; Joiner & Kashubeck, 1996). Ethnicity is generally defined as the acceptance of the norms, mores, and practices of one's culture of origin and the concomitant sense of belonging to that cultural group (American Psychological Association, 2003). Individuals are typically categorized into ethnic groups based on race, the socially constructed characterization of individuals by visible traits (e.g., skin color, hair color and texture, facial features, and stature), and culture of origin (Katz, 1985; Phinney, 1996).

Ethnicity may be protective against body dissatisfaction in at least two ways. First, ethnic groups with a non-Western culture of origin may not idealize an ultrathin figure and thereby provide individuals with larger, more realistic and attainable physical ideals. Second, less value may be placed on physical appearance as a defining feature of a woman's worth, role in society, and indicator of success. In these ways, ethnic minorities living in a dominant Western culture may have comparable levels of awareness of the thin ideal but may not internalize such information because of an affiliation with a culture of origin that does not esteem or support such values and ideals.

Mexican Americans and Eating Disorder Symptomatology

In contrast to mainstream Western culture, Mexican culture traditionally idealizes a larger. curvy physique (Chamorro & Flores-Ortiz, 2000) and values interdependent, close family relationships (familismo), communality, collectivism, deterministic thinking (fatalismo), and sociability (personalismo; Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002). Mexican American culture comprises aspects of Mexican and Western (i.e., American) culture. Mexican Americans are likely aware of Western cultural values and the thin ideal (because part of their culture is, indeed, Western) but may be protected against internalization and body dissatisfaction because of an affiliation to a culture of origin that does not idealize a thin physique and places less value on appearance as a determinant of worth and social roles.

Data on eating disorders and their concomitants in Mexican Americans are particularly sparse. For example, of the 17,781 participants utilized in a meta-analysis of 35 studies examining the role of ethnicity and culture in the development of eating disturbances (Wildes, Emery, & Simons, 2001), only 138 were Hispanic. Furthermore, instead of isolating data from Mexican Americans in research analyses, these data are generally integrated into a Hispanic category. Although this information is important, the Hispanic population technically comprises any American of Mexican, Puerto Rican, Cuban, Central American, South American, or other Spanish culture of origin (Santiago-Rivera et al., 2002; Ramirez & de la Cruz, 2003). Grouping Mexican Americans into a Hispanic group overlooks group heterogeneity and thereby may limit the detection of differences based on unique characteristics of a specific culture of origin.

The lack of research on Mexican Americans is particularly problematic because the Hispanic population is the most rapidly growing ethnic minority group in the United States (Valdez, 2000). Furthermore, according to the 2002 census, individuals of Mexican descent (an estimated 20 million) are the largest Hispanic subgroup (Ramirez & de la Cruz, 2003). A few studies have examined eating disorder symptoms in Mexican American women (e.g., Kuba & Harris, 2001; Lester & 1995) but no studies, to our knowledge, have compared the strength of the relationships between awareness, internalization, and body dissatisfaction in Mexican Americans with other ethnic groups.

Spain and Eating Disorder Symptomatology

There is a significant historic and cultural link among Spanish, Mexican, and Mexican American culture (for a review see Pontón & León-Carrión, 2001). For example, Mexican culture involves primarily the merging of various indigenous Mexican cultures (e.g., Aztec, Mayan, Incan) and Spanish culture. Mexican American culture, then, is a fusion of Spanish, indigenous Mexican, and European American cultures. Spanish culture is characterized by patriarchal family structures, collectivist values, distinct gender roles, male dominance, female subordination, and self-sacrifice for the needs of others (*marianismo*), social order, and tradition (Gouveia, de Albuquerque, Clemente, & Espinosa, 2002; Santiago-Rivera et al., 2002).

Given the cultural affiliation between Spanish and Mexican American cultures, it is important to compare Mexican Americans not only with other American ethnic groups but also to Spaniards. In addition, published research on eating disorders and body dissatisfaction in Spain is sparse in English journals. Existing research comparing Spanish, Mexican, Mexican American, and European American women on eating disorder symptoms, body

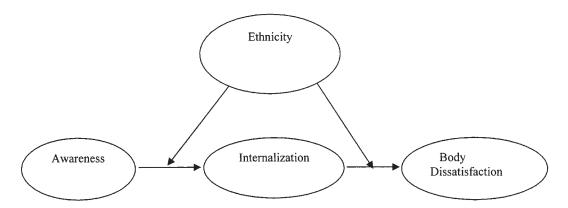
dissatisfaction, and physical ideals has yielded mixed results. In a comparison of eating disorder symptoms in Spain and Mexico, Raich et al. (2001) found eating disorder symptoms and body dissatisfaction to be more prevalent and severe in Spanish women than in Mexican women. Peresmitre and Garcia (2000) found that Mexican women selected a thinner ideal figure and assigned more importance to physical appearance in social situations with men and at work than Spanish women. However, being judged as being physically attractive from family members and at parties was rated significantly less important to Mexican women than to Spanish women. Comparing Spanish and American women, Gleaves et al., (2000) reported similar body size ideals and body dissatisfaction, although in normal weight individuals (BMI = 20-25) there was a tendency for Americans to be more dissatisfied with their body size than were Spaniards. Similarly, in a study comparing adolescents in the United States and Spain, there was a greater interest in losing weight and more eating disorder symptoms in American girls than Spanish girls (Raich et al., 1992). Generally, data suggest that European American women have higher levels of eating disorder symptomatology than Spanish, Mexican American, or Mexican women, with inconclusive findings comparing Spanish, Mexican, and Mexican American women.

Study Objectives and Predictions

In the current study, we explored the potential for ethnicity to protect against internalization of Western physical ideals and body dissatisfaction. Our goal was to examine two intertwined issues. First, we evaluated the sociocultural model by testing the mediational effect of internalization on the relationship between awareness and body dissatisfaction in three ethnic groups. Second, we investigated the potential for ethnicity to moderate these relationships (Figure 1).

To explore these issues, we recruited female participants from three ethnic groups: European American, Mexican American, and Spanish. The primary research questions were: Is the relationship between awareness and internalization and between internalization and body dissatisfaction the same across European American, Mexican American, and Spanish women? If not, how does each relationship differ? We hypothesized that the relationships would be stronger for European American women than for Mexican American women, with no specific predictions regarding the Spanish group.

FIGURE 1. Effect of ethnicity as a moderating variable on the sociocultural model.



Method

Participants

Mexican American (n = 103), European American (n = 103) 101), and Spanish (n = 115) female students attending large universities in the southwestern United States and Spain participated in the study. In this article, the term Mexican American refers to persons of Mexican descent who are living in the United States (i.e., either because they are American citizens [n = 92] or because they are Mexican citizens living in the United States [n = 8]). Participants were divided into ethnic groups based on their self-identified ethnicity. Data from 19 participants were eliminated because of missing data, leaving analyses with 100 participants per group. The majority of Mexican American participants were second generation (n = 50), followed by fourth generation (n = 20), third generation (n = 13), first generation (n = 9), fifth generation and above (n = 7), and other (n = 1).

European American participants were recruited from undergraduate psychology courses whereas Mexican American participants came from both undergraduate psychology courses and various student organizations comprising Mexican Americans (e.g., the Mexican Student Association). Participants recruited from psychology classes received research credit in exchange for participation whereas those recruited from student organizations participated voluntarily. Spanish participants volunteered from undergraduate psychology classes.

Measures

European American and Mexican American participants completed all measures in English whereas Spanish participants completed them in Spanish. When available, we used preexisting Spanish versions of a measure. When not available, we translated the English version and evaluated its psychometric properties. Based on results described by Warren, Gleaves, Cepeda-Benito, and Fernandez (2002), we concluded that all Spanish translations were appropriate for use.

The Sociocultural Attitudes Towards Appearance Questionnaire-Revised (SATAQ-R; Cusumano & Thompson, 1997; Thompson et al., 1999) is a 21-item questionnaire designed to measure recognition and acceptance of culturally and socially endorsed appearance standards. The SATAQ-R has two reported factors—an 11-item awareness subscale (AWARE), indicating the extent to which an individual acknowledges a cultural emphasis on appearance and thinness, and a 10-item internalization subscale (INTERN), indicating the extent to which an individual personally accepts these standards (Heinberg, Thompson, & Stormer, 1995). In the current European American sample, Cronbach's alpha value was .90 using all items, .85 in the AWARE subscale, and .85 in the INTERN subscale. In the Mexican American sample, Cronbach's alpha value was .86 using all items, .81 in the AWARE subscale, and .83 in the INTERN subscale. A Spanish version was not available. Consequently, the measure was translated, examined psychometrically, and cross-validated with the English version (see Warren et al., 2002). In the current sample, Cronbach's alpha value was .87 using all items, .83 in the AWARE subscale, and .89 in the INTERN subscale.

The Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper & Fairburn, 1987) is a 34-item measure that assesses general satisfaction with one's body shape and weight (Cooper et al., 1987). In the current data, Cronbach's alpha value was .97 in both the European American and the Mexican American groups. A translated Spanish version (Raich et al., 1996) was used, yielding a Cronbach's alpha value of .97 in the current sample.

A demographic questionnaire asked questions regarding one's self-identified age, weight, height, and ethnicity. From these data, we calculated each participant's BMI.

Results

Analyses were conducted using Statistics Package for the Social Sciences (SPSS for Windows Version

TABLE 1. Descriptive information by ethnic group

	European American	Mexican American	Spanish	F	р	η^2
Age (years)	18.86 (3.05) _a	19.79 (2.04) _b	18.66 (2.20) _a	5.96	<.01	.04
BMI	22.25 (3.08) _a	23.68 (3.88) _b	21.16 (2.68) _c	15.09	<.01	
SATAQ-R	, , , ,	, ,,,	, , , , ,			
AWARE	44.14 (5.85) _a	40.53 (6.23) _b	42.91 (6.38) _a	8.86	<.01	.06
INTERN	37.47 (7.22) _a	33.90 (7.03) _b	31.26 (8.04) _c	17.50	<.01	.11
BSQ	106.18 (37.67) _a	91.30 (33.76) _b	84.07 (30.85) _b	10.87	<.01	.07

Note: Means in the same row that do not share subscripts differ at p < .05 on Tukey's honestly significant difference comparison. BMI = body mass index; SATAQ-R = Sociocultural Attitudes Towards Appearance Questionnaire-Revised; AWARE = Awareness subscale; INTERN = Internalization subscale; BSQ = Body Shape Questionnaire.

11.0, 2001) and LISREL 8.5 (Jöreskog & Sörbom, 2001).

Descriptive Information

Descriptive information for the samples is presented in Table 1. Univariate analyses of variance (ANOVAs) indicated significant differences across ethnic groups on age, BMI, awareness, internalization, and body dissatisfaction. Tukey's post-hoc tests indicated that the Mexican American group was significantly older than the European American and Spanish groups, who did not differ significantly. In addition, the Mexican American group had a significantly higher BMI than the European American, which had a significantly higher BMI than the Spanish group. According to Cohen (1977), effect sizes were small to medium for age and BMI ($\eta^2 < .01 = \mathrm{small}, \, \eta^2 < .06 = \mathrm{medium}, \, \mathrm{and} \, \eta^2 > .14 = \mathrm{large}).$

With respect to awareness and internalization, the Mexican American group was less aware of a thin ideal than the Spanish and European American groups (which did not differ significantly) and the European American group had significantly higher internalization than the Mexican American group, which, in turn, had significantly higher internalization than the Spanish group. The European American group had more overall body dissatisfaction than the Spanish and Mexican American groups (which did not differ significantly).

Path Analysis

To test the mediational effect of internalization on the relationship between awareness and body dissatisfaction and to investigate the potential for ethnicity to moderate these relationships, we conducted path analyses. As the estimation method, we used maximum likelihood with robust SEs (see Curran, West, & Finch, 1996) because the data were not multivariate normal (Morbia's test for multivariate normality [skewness and kurtosis] = 52.83, p < .01 in Spanish data; 10.44, p < .01 in Mexican data; and 19.58, p < .01 in European American data). In pre-

liminary analyses, BMI significantly predicted body dissatisfaction but did not predict internalization. Consequently, the baseline path model (Model 1) specified BMI and awareness as predictor variables and internalization and body dissatisfaction as dependant variables while setting the path between BMI and internalization to zero.

The fit of the path model was assessed by examining the chi-square value. The normal theory chisquare statistic is most commonly used, but leads to an inflated Type 1 error rate under conditions of multivariate nonnormality (Finch & West, 1997). Consequently, we used two more conservative chisquare statistics that correct for nonnormality: the chi-square corrected for nonnormality (CNN; Jöreskog & Sörbom, 2001) and the Satorra-Bentler scaled chi-square statistic (SB; Jöreskog & Sörbom, 2001). Additional fit indices included the normed fit index (NFI; Bentler & Bonett, 1980), the comparative fit index (CFI; Bentler, 1990), and the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993). Values of the NFI and CFI range from 0 to 1.0, with values close to 1.0 indicating the best fit. Values of the RMSEA range from 0 to 1.0, with a value close to .05 indicating a close fit and .10 or greater signifying a poor fit (Finch & West, 1997).

To test for factorial invariance across ethnic groups, we conducted four "stacked" multigroup measurement models. The baseline model (i.e., Model 1) allowed the parameters to be estimated separately within each ethnic group. Model 2 was the same as Model 1 except it constrained the path between awareness and internalization to be the same across groups. Model 3 was the same as Model 1 except it constrained the path between internalization and body dissatisfaction. Model 4 constrained both paths concurrently. Changes in model fit are assessed by testing changes in chisquare values. If the constrained model's fit is significantly worse than the unconstrained model's fit (i.e., the chi-square change score is statistically significant), one or more of the paths differ significantly across ethnic groups (described by Bollen,

TABLE 2. Path analysis results

Model	χ^2 1	$\chi^2 2$	df	NFI	CFI	RMSEA	Δdf	$\Delta \chi^2$ 1	<i>p</i> 1	$\Delta \chi^2 2$	р2
1	6.96	5.72	6	.97	.99	<.01					
2	14.76	11.33	8	.94	.96	.07					
		Compare	Model 1	with 2			2	7.8**	.02	5.61*	.06
3	16.32	10.81	8	.95	.98	.06					
		Compare	Model 1	with 3			2	9.36**	<.01	5.09*	.08
4	23.06	17.79	10	.92	.95	.09					
		Compare	Model 1	with 4			4	16.10**	<.01	12.07**	.02
		Compare	Model 2	with 4			2	8.30**	.02	6.46**	.04
		Compare	Model 3	with 4			2	6.74**	.03	6.98**	.03

Note: $\chi^2 1$ is the chi-square corrected for nonnormality; $\chi^2 2$ is the Satorra-Bentler scaled chi-square. Model specification: Model 1 = paths between awareness and internalization and between internalization and body dissatisfaction unconstrained; Model 2 = path between awareness and internalization invariant; Model 3 = path between internalization and body dissatisfaction invariant; Model 4 = both paths invariant. NFI = normed fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation.

**p < .05. *p < .10.

TABLE 3. Unconstrained path model (model 1): regression weights and 95% CIs as a function of ethnic group

	European American	Mexican American	Spanish
Awareness→internalization			
Coefficient	0.79	0.47	0.32
CI	.6395	.2569	.0460
Internalization→body dissa	tisfaction		
Coefficient	3.47	2.25	2.50
CI	2.67-4.27	1.43-3.07	1.9-3.1

Note: 95% CI 95% confidence interval.

1989). As can be seen in Table 2, Model 1 fit the data almost perfectly. Comparing Model 1 with Model 2, Model 1 with Model 3, and Model 1 with Model 4 resulted in a significant loss in fit.

Given that there was a significant loss in fit when comparing constrained models with the unconstrained baseline model, we examined path coefficients and confidence intervals in the unconstrained model to determine the nature of group differences. As displayed in Table 3, the relationships between awareness and internalization and between internalization and body dissatisfaction were significantly stronger in the European American group than in the Mexican American and Spanish groups (which did not differ significantly). Figure 2 displays these relationships pictorially with standardized path coefficients for each group.

Discussion

In the current study, we evaluated the sociocultural model of eating disorders and explored the potential for ethnicity to protect against internalization of Western appearance ideals and body dissatisfaction. Results supported the sociocultural model. The relationships between awareness and internalization and between internalization and body dissatisfaction were positive, regression coefficients were substantially large, fit indices were excellent, and path analysis provided evidence for the mediational effect of internalization on the relationship between awareness and body dissatisfaction. Results also supported ethnicity as a moderator between these two relationships. Both relationships were significantly stronger for European American women than for Mexican American or Spanish women.

There are limitations of this study that should be considered. The data are cross-sectional, which does not allow for causal inferences. Only longitudinal research can actually demonstrate whether a factor, such as ethnicity, is protective. In addition, although eating disorder symptomatology concerns in college-aged women are epidemic (Low et al., 2003), the generalization of these findings to other ages and to clinical samples is questionable. Furthermore, we did not use a measure of ethnic identity, which is the degree to which an individual identifies with his or her own ethnic group. Inclusion of this construct would have been useful in determining how strongly Mexican American participants identified with Mexican, American, or Mexican American culture.

Despite these limitations, this study advances the field in various ways. Statistically, path analysis can be more meaningful than simple regression analyses (which are typically used) because one can test relationships simultaneously while controlling for multivariate nonnormal data. Given the tendency of almost all data in the social sciences to be nonmultivariate normal, such an approach should be used more frequently. Second, instead of simply comparing mean levels of awareness, internalization, and body dissatisfaction across ethnic groups, we examined how ethnicity can interact with awareness and

FIGURE 2. Standardized path coefficients in an unconstrained model (Model 1) by group.

Euro-American



Spanish



Mexican American



internalization to put one at greater or less risk for body dissatisfaction. Third, this study compared Mexican Americans, one of the largest ethnic minority groups in the United States, with two ethnic majority groups whose cultures created, in part, Mexican American culture. In addition, isolating Mexican American participants instead of examining Hispanics as a whole allowed for more specific examination of the possible protective influence of Mexican culture of origin.

The ability for ethnicity to serve as a protective factor against internalization and body dissatisfaction may have important implications for clinicians, parents, prevention programs, and Western culture as a whole. Culture is fluid and dynamic. it is constantly informed by historic, ecologic, political, and economic forces (American Psychological Association, 2003). Identifying aspects of non-Western culture that can protect against the development of eating disorder symptomatology may help guide Western cultural growth. The results of this study suggest that for Western culture to prevent the development of body dissatisfaction, it should strongly denounce the ultrathin ideal propagated by current mainstream Western culture while implementing a healthier, more realistic female physical ideal. Also, a de-emphasis on appearance as a determinant of female value and a stress on other indicators of worth that are attainable and maintainable (e.g., intelligence, relationships, spiritual connection) is critical.

In the future, we must not only understand differences in eating disorder symptoms across ethnic groups, we must also examine the ways in which ethnicity interacts with other variables that put an individual at greater or lesser risk to develop eating issues. Given that European physical traits typically represent the Western physical ideal (e.g., light eyes, fine blonde hair, tall stature, and a small nose) and that these Western ideals may conflict with the appearance ideals of other cultures, researchers have suggested that some ethnic minorities living in Western culture may actually be at higher risk for the development of eating disorder symptoms (Kempa & Thomas, 2000; Miller et al., 2000). Furthermore, the same cultural factors that protect against body dissatisfaction in some ethnic groups may serve as risk factors for other health problems, such as obesity. Research suggests that rates of obesity in the United States continue to increase. For example, in the Hispanic population, rates of obesity increased 80% from 1991 to 1998

(Mokdad et al., 1999). Future research should investigate how factors specific to ethnic minorities (e.g., acculturation, discrimination, ethnic identity) interact with awareness, internalization, and body dissatisfaction to protect or put one at greater risk for eating disorder symptoms and obesity. Examination of these relationships in other ethnic groups and exploration of other aspects of the sociocultural model (e.g., influence of family, peers, the media) also are warranted.

In conclusion, the prevalence of eating disorders appears to change across time as cultures change. As noted by Miller and Pumariega (2001), change in appearance-related values and ideals may happen on an individual level, such as when one migrates from a non-Western culture to a Western culture and subsequently acculturates, or at a macro level when the entire make-up of a culture changes. Awareness of Western ideals is becoming more accessible to non-Western cultures through mediums like the Internet, television, movies, direct travel accessibility, and music. As this dissemination of information occurs, it will be important not only for Western culture to be informed by potentially protective aspects of non-Western cultures, but also to prevent non-Western cultures from espousing aspects of Western culture that will subsequently put their people at greater risk for the development of body dissatisfaction and eating pathology.

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