

Cultural Body Shape Ideals and Eating Disorder Symptoms Among White, Latina, and Black College Women

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Previous studies have reported inconsistent relationships between body image, eating disorder symptoms, and acculturation-relevant variables. The current study examined these variables in a sample of White, Latina, and Black college women ($N = 276$). White and Latina participants selected slimmer personal body shape ideals than Black women. Among Black women, the discrepancy between perceived body shape and perceived ideal body shape for the United States was predictive of Eating Disorder Inventory Body Dissatisfaction (EDI-BD) and Drive for Thinness (EDI-DFT) scores. The discrepancy between perceived body shape and perceived ideal for their ethnic group also predicted EDI-BD scores. Among Latinas, the discrepancy between perceived body shape and perceived body shape ideal for their ethnic group was predictive of EDI-BD and EDI-DFT scores, whereas a discrepancy between perceived body shape and perceived ideal for the United States was not predictive of eating disorder symptoms. Finally, higher levels of acculturative stress, but not acculturation, were associated with EDI-BD scores among Black women and EDI-DFT scores among Latinas. Findings underscore the importance of considering cultural variables such as acculturative stress when conducting clinical work with ethnic minority women.

Keywords: ethnic minority, eating disorders, bulimia nervosa, body dissatisfaction, cultural differences, acculturation

Naturalistic and experimental studies demonstrate that clinicians are less likely to recognize eating disorders in ethnic minority women than in White women, even after controlling for symptom severity (Becker, Franko, Speck, & Herzog, 2003; Gordon, Bratole, Wingate, & Joiner, 2006). This finding may be because of a stereotype that only White women develop eating disorders, and based upon observations that, on average, women of ethnic minority groups report lower rates of body dissatisfaction and eating disorder symptomatology than White women (e.g., Abrams, Allen, & Gray, 1993; Gluck & Geliebter, 2002; Sanchez-Johnsen et al., 2004; Striegel-Moore et al., 2003). Some have proposed that women of ethnic minority groups are at reduced risk for eating disorders because their cultural groups espouse larger, more attainable body ideals, which reduces pressure to conform to a thin mainstream body ideal (see Gilbert, 2003, for a review).

Two meta-analyses have investigated the magnitude of differences in eating disorder symptoms between women of ethnic minority groups and White women. Wildes, Emery, and Simons

(2001) reported that non-White women and girls exhibited fewer eating disturbances than White women and girls in approximately 80% of the 35 studies included, but that the difference between groups was small in magnitude (Cohen's $d = .29$). Meanwhile, O'Neill (2003) reported that White women, compared with Black women, had a greater overall risk for disturbed eating attitudes and restricting behaviors (Hedges' $d = .38$), but found no significant differences with regards to binge eating and bulimic behaviors. Both meta-analyses shared a limitation: because of an insufficient number of studies conducted on ethnic minority groups other than Black women, other ethnic minority groups were either not included or were collapsed into a "non-White" group. Therefore, the meta-analyses did not yield information about rates of eating disturbances among women from other ethnic minority groups (e.g., Latinas).

More recent studies have not found significant differences in eating disorder symptoms between ethnic groups in the United States (Forbes & Frederick, 2008; Franko, Becker, Thomas, & Herzog, 2007; Shaw, Ramirez, Trost, Randall, & Stice, 2004). Over time, ethnic minority women may have become less protected from pressures to conform to the U.S. majority group's thin ideal. This is a plausible explanation, given that the majority of women living in the United States, regardless of ethnic group, are exposed to the mainstream thin ideal via the media. Consequently, women of all cultural backgrounds may experience comparable sociocultural pressure to conform to majority U.S. culture (Shaw et al., 2004). In partial support of this hypothesis, a recent meta-

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analysis found that Latinas and White women exhibited similar levels of body dissatisfaction, whereas Black women were slightly less dissatisfied with their bodies than White women (Grabe & Hyde, 2006).

Acculturation and Acculturative Stress

Kempa and Thomas (2000) proposed that, despite the tendency for larger cultural ideal body types, members of ethnic minority groups may be vulnerable to disordered eating when they attempt to cope with stress associated with discrimination, being a member of a devalued group, and conflicts between the dominant culture and their culture of heritage. Minority women may be at particular risk for body dissatisfaction when exposed to the mainstream media because of the frequent depictions of White women as the standard of beauty. Body types deemed as beautiful by mainstream society may seem particularly unattainable for minority women whose physical attributes are often discrepant from the mainstream standard (e.g., regarding skin tone, facial features, and body proportions; Evans & McConnell, 2003).

Acculturation is defined as "a process of attitudinal and behavioral change undergone by individuals who reside in multicultural societies or who come in contact with a new culture" (Marin, 1992). Theoretically, acculturation should accelerate the adoption of mainstream U.S. body ideals, such that eating disorder symptoms increase as levels of acculturation increase. Consistent with this viewpoint, Pepper and Ruiz (2007) found that antifat attitudes (characteristic of mainstream U.S. values) were significantly higher among high acculturated Latinas and European Americans than low acculturated Latinas and bicultural Latinas (i.e., Latinas who strongly identify with both the dominant culture and their culture of heritage), and that antifat attitudes were positively correlated with body dissatisfaction and eating concerns. Similarly, Ayala, Mickens, Galindo, and Elder (2007) found that Mexican American adolescent girls who reported the most agreement with mainstream society's standards of appearance had the greatest amount of body dissatisfaction. Higher levels of acculturation have also been linked to partial eating disorder syndromes among Latinas (Gowen, Hayward, Killen, Robinson, & Taylor, 1999), and increased eating disorder symptomatology among Mexican American (Chamorro & Flores-Ortiz, 2000) and Black women (Abrams et al., 1993; Pumariaga, Gustavson, Gustavson, Motes, & Ayers, 1994). In contrast, others have found that levels of acculturation are unrelated to eating disorder symptoms among Latinas and Black women (Joiner & Kashubeck, 1996; Lester & Petrie, 1995) after controlling for other known predictors of eating disorder symptomatology (e.g., self-esteem).

To further complicate matters, Lester and Petrie (1995) found that endorsement of mainstream body ideals significantly predicted bulimic symptoms among Mexican American women but not among Black women. In addition, Sussman, Truong, and Lim (2007) found that higher levels of acculturation (defined by the generational status and language use of the participant) were associated with more eating disorder symptoms for European-descended Americans and less eating disorder symptoms for African-descended Americans. The authors suggested that this finding may be because of their operationalization of acculturation as generational status rather than as a direct assessment of the participant's identification with their ethnic group and dominant

American society. Sussman et al. (2007) suggested that African-descended Americans may have been acculturating more to the larger shape body ideals characteristic of African American culture rather than mainstream society's slimmer body ideals.

A limitation to previous research in this area is related to the conceptualization of acculturation as a unitary construct whereby high levels of dominant culture identity are on one end of a continuum and high levels of culture of heritage identity are on the other end. Berry (2005) proposed that acculturation is more appropriately conceptualized as consisting of two factors, such that participants can have high levels of identification with their culture of heritage, the dominant culture, neither, or both cultures. In one study using a two-factor approach to acculturation, Cachelin, Phinney, Schug, and Striegel-Moore (2006) compared Mexican American women with eating disorders to community controls and found that orientation toward Anglo American culture was significantly associated with eating disorder status, while orientation toward Mexican culture was not. This finding suggests that the extent to which an individual embraces mainstream society values predicts eating disorder symptoms, regardless of how strongly an individual identifies with their culture of heritage.

Another possible explanation for the mixed findings could be related to the examination of the broader construct of acculturation rather than a more specific focus on difficulties that are associated with the acculturation process (i.e., acculturative stress). Gowen et al. (1999) suggested that acculturative stress occurs when an individual tries to fit in with a culture that is different than their culture of origin, and that this can lead to maladaptive coping behaviors such as unhealthy weight regulation. Perez, Voelz, Pettit, and Joiner (2002) found that body dissatisfaction was correlated with bulimic symptoms in Black women and Latinas who reported high levels of acculturative stress, but not among Black women and Latinas who had low levels of acculturative stress. Similarly, Reddy and Crowther (2007) found that higher levels of cultural conflict (cf. acculturative stress) were related to body dissatisfaction and unhealthy eating attitudes among South Asian women, while acculturation was not. Therefore, it appears that acculturative stress, in addition to acculturation, is important to consider when studying eating disorder symptoms among women of ethnic minority groups.

The Current Study

The current study examined eating disorder symptoms and related variables among Latina, Black, and White college women. Based on previous research (e.g., Striegel-Moore et al., 2003), it was predicted that White women, compared with Black women and Latinas, would select a slimmer body figure to represent both their ethnic group's ideal body type and their personal ideal body type. Accordingly, we predicted that White women would report higher levels of disordered eating symptoms than Latinas or Black women. The current sample consisted of women who were attending a predominantly White (70%) university. Thus, we predicted that mainstream U.S. body ideals would have an impact on participants such that, among Black women and Latinas, the discrepancy between perceived body shape and perceived ideal body shape for U.S. mainstream culture would be more predictive of eating disorder symptoms than the discrepancy between perceived body shape and perceived body shape ideal for their own ethnic

group (Cachelin et al., 2006). Finally, based on previous findings and theory (Gowen et al., 1999; Perez et al., 2002), we hypothesized that Black women and Latinas with higher levels of acculturative stress would be more likely to engage in disordered eating behaviors, perhaps in an effort to cope with their distress. Analyses included and controlled for self-esteem and socioeconomic status (SES) in an effort to reduce the chance of third variables confounding the results (e.g., ethnic group and bulimic symptoms having a significant correlation because of a third variable, such as SES or self-esteem; Joiner & Kashubeck, 1993; Reagan & Hersch, 2005).

Method

Participants

Two hundred seventy-six female undergraduate students who were enrolled in an introductory psychology course at a large, southeastern state university participated in this study. The mean age of the participants at the time of data collection was 18.88 years ($SD = 2.65$), with a range of 17 to 49 years. The ethnic composition of the sample was 29% White ($n = 79$), 44% Black ($n = 122$), and 27% Latina ($n = 75$). During the first semester of the study, the experimenters opened the study to women of all ethnic groups, but during the second and third semesters of data collection, only Black women and Latinas were eligible to participate. This was done in an effort to oversample women of ethnic minority groups.

While generational status was not directly assessed, we did assess the countries of origin for the participants' families. For the Latina participants, most had a Cuban (29%; $n = 22$) or Puerto Rican (19%; $n = 14$) background. The following countries were represented in the sample by 6 or fewer participants: Argentina, Colombia, Dominican Republic, Ecuador, Honduras, Mexico, Nicaragua, Panama, Peru, Spain, Uruguay, and Venezuela. Because of low numbers of participants in most groups, we did not have sufficient power to conduct analyses for Latinas separately by their country of origin. Among Black participants, the majority (78%, $n = 95$) were born in the United States, while 21% ($n = 25$) were born in the Caribbean (e.g., Jamaica, Haiti), and 2% ($n = 2$) were born in Africa. With regards to language use, 96% ($n = 72$) of the Latinas reported using English to communicate with the majority of their friends, while 61% ($n = 46$) reported speaking mostly English in their homes. Approximately 20% ($n = 15$) reported speaking mostly Spanish in their homes, and 17% ($n = 13$) reported speaking English and Spanish equally in their homes. For Black participants, 98.3% ($n = 120$) reported speaking English to the majority of their friends, while 88% ($n = 107$) reported speaking mostly English in their homes. Approximately 8% ($n = 10$) mostly spoke a language other than English (e.g., Creole) or Spanish in their home, and 4% percent ($n = 5$) spoke both English and another language in their homes.

Procedure

All participants signed a consent form agreeing to participate in a study about culture and behavior. Participants were informed that they would be filling out questionnaires about their personal views, feelings, and attitudes, and were assured that their responses would

be confidential. After completion of the battery of questionnaires, participants were debriefed and questions and/or concerns were addressed by the experimenters. All procedures were approved by the university's institutional review board.

Measures

Eating Disorder Inventory (EDI) subscales. The EDI (Garner, Olmstead, & Polivy, 1983) is a self-report inventory that consists of 64 questions about attitudes and behaviors related to eating disorders. It yields eight subscale scores, three of which were the focus of the current study. Drive for Thinness (EDI-DFT), Bulimia (EDI-B), and Body Dissatisfaction (EDI-BD) were included because they are the most explicitly linked to eating disorder symptoms. The EDI instructs participants to rate statements on a six-point scale (1 = never to 6 = always). The EDI-DFT scale includes items such as, "I think about dieting"; the coefficient alphas in this sample were .93 for White women, .88 for Black women, and .94 for Latinas (the alpha for the entire sample was .92). The EDI-B subscale had coefficient alphas of .84 for White women, .78 for Black women, and .87 for Latinas (the alpha for the entire sample was .85), and included items such as, "I stuff myself with food." The EDI-BD subscale is comprised of statements such as, "I think that my stomach is too big," and the coefficient alphas for the current sample were .91 for White women, .90 Black women, and .90 for Latinas (the alpha for the entire sample was .91).

Stunkard Body Figure Scale (BFS). The BFS (Stunkard, Sorenson, & Schlusinger, 1983) consists of pictures of seven female body figures that range from very underweight to very overweight. The participants were presented with the BFS four separate times, and asked to select their ethnic group's ideal body shape, the United States mainstream culture's ideal body shape, their personal ideal body shape, and their perceived body shape. The scale has demonstrated reliability and validity (Stunkard et al., 1983).

Stephenson Multigroup Acculturation Scale (SMAS). The SMAS (Stephenson, 2000) is a valid and reliable 32-item questionnaire that yields two scale scores: Ethnic Society Immersion (ESI) and Dominant Society Immersion (DSI; Stephenson, 2000). The ESI scale score reflects the level to which one retains values and practices of an ethnic group other than the dominant society and includes items such as, "I like to speak my native language." The DSI scale score reflects the extent to which an individual adopts the practices of the dominant society and includes items such as, "I like to eat American foods." Participants select one of the following responses for each statement: false, partly false, partly true, and true. The SMAS was only administered to Latina and Black participants because we did not have hypotheses about acculturation and eating disorder symptoms in White participants. The coefficient alphas for the ESI and DSI scales, respectively, in this sample were .77 and .78 for Black participants and .65 and .73 for Latina participants. The alphas for the entire sample were .75 and .74 for the ESI and DSI, respectively).

Societal, Attitudinal, Familial, and Environmental Acculturative Stress Scale (SAFE). The SAFE (Padilla, Wagatsuma, & Lindholm, 1985) is a 24-item self-report scale that measures acculturative stress in social, attitudinal, familial, and environmental contexts, as well as perceived discrimination toward one's

ethnic group (Mena, Padilla, & Maldonado, 1987). Participants rate statements such as “Many people have stereotypes about my culture or ethnic group and treat me as if they are true,” on a scale ranging from 1 (*not stressful*) to 5 (*extremely stressful*), with the additional choice of 0 (*not applicable*). The coefficient alphas for the SAFE in this sample were .88 for White participants, .86 for Black participants, and .89 for Latina participants (the alpha for the entire sample was .87; see Joiner & Walker, 2002, for validity data).

Rosenberg Self-Esteem Scale (RSE). Global self-esteem was measured using the RSE (Rosenberg, 1965), a 10-item scale that asks respondents to rate statements such as, “I take a positive attitude toward myself,” on a 5-point scale. Adequate reliability and validity of this measure have been reported (Blascovich & Tomaka, 1991). The alpha coefficients for the RSE in this sample were .92, .85, and .91 for White, Black and Latina participants, respectively (the alpha for the entire sample was .90). Self-esteem was assessed because it is a well-established correlate of eating disorder symptoms (e.g., Polivy & Herman, 2002), and its inclusion allowed for analyses that rule it out as a confounding variable (cf. Joiner & Kashubeck, 1996; Lester & Petrie, 1995).

Family income. Because participants were undergraduate students, each participant was asked to estimate her family of origin’s annual income by choosing from the following options: (1) less than \$10,000, (2) \$10,000–\$20,000, (3) \$20,000–\$30,000, (4) \$30,000–\$40,000, (5) \$40,000–\$60,000, and (6) \$60,000 and above. Family income was used as a proxy for SES.

Results

Ethnic Group Differences in Scale Reliability

Fisher’s *r*-to-*z* transformations were computed comparing the coefficient alpha of the White sample to the Black and Latina samples for the three subscales of the EDI, as well as the SMAS, SAFE, and RSE. This resulted in a total of 10 comparisons. A Bonferroni correction for 10 computations would yield a very strict a priori *p* value of .005. We selected a more lenient a priori *p* value of .01, but still found no statistically significant difference between the White group and either minority group in internal consistency.

Ethnic Group Differences in Body Ideals and Eating Disorder Symptoms

Sample means and standard deviations for all measures are displayed in Table 1, and correlations between all variables are displayed in Tables 2 and 3. Ethnic group differences in participants’ selection of the ideal body shape for their ethnic group, the ideal body shape of mainstream U.S. culture, personal ideal body shape, and perceived current body shape were examined using a one-way analysis of covariance (ANCOVA) framework. The first ANCOVA indicated that there were ethnic group differences with regard to the perceived ideal body size for one’s own ethnic group even after controlling for the effects of family income and self-esteem, $F(2, 253) = 32.40, p < .01$. Specifically, White women selected slimmer body ideals for their ethnic group when compared to both Latinas and Black women (both *ps* < .01), and Latinas selected a slimmer body ideal for their ethnic group than

Table 1
Means and SDs of Variables by Ethnic Group

Variable	M (SD)		
	White women	Black women	Latinas
EDI-B	15.56 (6.41) _a	11.12 (4.34) _{ab}	13.17 (5.76) _{ab}
EDI-BD	33.73 (10.86) _a	26.24 (10.45) _{ab}	30.73 (10.24) _b
EDI-DFT	23.53 (9.46) _a	16.55 (8.06) _{ab}	21.96 (9.12) _b
Ethnic group ideal	3.20 (.73) _a	4.15 (.65) _{ab}	3.83 (.66) _{ab}
Family income	5.35 (1.12) _a	4.21 (1.57) _a	4.85 (1.42) _a
Mainstream ideal	3.18 (.79)	3.44 (.89)	3.21 (.61)
Perceived body shape	4.00 (.91)	4.20 (1.13)	4.12 (.98)
Personal ideal	3.13 (.66) _a	3.62 (.73) _{ab}	3.19 (.62) _b
RSE	39.30 (7.86)	43.81 (6.25)	40.77 (7.49)
SAFE	25.22 (13.56)	28.10 (14.15)	26.90 (14.43)
SMAS-ESI	—	22.75 (8.13) _a	19.36 (6.21) _a
SMAS-DSI	—	38.40 (6.93) _a	32.14 (4.87) _a

Note. EDI = Eating Disorder Inventory (Garner et al., 1983); EDI-B = bulimia subscale of the EDI (range = 7–42); EDI-BD = body dissatisfaction subscale of the EDI (range = 9–54); EDI-DFT = drive for thinness subscale of the EDI (range = 7–42); family income = household income for the participant’s family of origin (range = 1–6); ethnic group ideal, mainstream ideal, perceived body shape and personal ideal refer to scores on the Stunkard Body Figure Scale (BFS; Stunkard et al., 1983; range = 1–7); RSE = Rosenberg Self-Esteem Scale (Rosenberg, 1965); range = 10–50; SAFE = Societal Attitudinal Familial and Environmental Acculturative Stress Scale (Padilla et al., 1985; range = 24–120); SMAS-ESI = Stephenson Multigroup Acculturation Scale–Ethnic Society Immersion (Stephenson, 2000; range = 0–33); SMAS-DSI = Stephenson Multigroup Acculturation Scale–Dominant Society Immersion (Stephenson, 2000; range = 22–45).

Means in the same row that share a subscript differ at $p < .05$.

Black women ($p < .01$). The results of a second ANCOVA suggested that there were no ethnic group differences in perceived current body shape, $F(2, 253) = 1.90, p = .15$.

The results of a third ANCOVA suggested that there were ethnic group differences with regard to personal ideal body shape after controlling for SES and self-esteem as well, $F(2, 253) = 6.61, p < .01$. In contrast to our predictions, there were no differences between the personal ideal body shapes of Latinas and White women ($p = .90$). However, Black women selected significantly larger personal ideal body shapes than both Latinas and White women (both *ps* < .01). The final ANCOVA indicated that all ethnic groups perceived the United States mainstream body ideal to be approximately the same size, $F(2, 253) = 0.79, p = .46$.

Next, a multivariate analysis of covariance (MANCOVA) was utilized to investigate group differences in eating disorder symptoms among Latinas, White, and Black women after controlling for self-esteem and family income. The omnibus was significant, $F(6, 506) = 3.57, p < .01$, and follow-up one-way ANOVAs revealed significant group differences with regards to bulimic symptoms, $F(2, 255) = 7.29, p < .01$, drive for thinness, $F(2, 255) = 5.67, p < .01$, and body dissatisfaction, $F(2, 255) = 4.43, p < .05$. Specifically, White women had significantly higher scores on the EDI-B than Latinas ($p < .05$), who had significantly higher scores than Black women ($p < .01$). On the EDI-DFT and EDI-BD subscales, there were no significant differences between White women and Latinas’ scores. However, White women and Latinas had higher average scores on both scales than Black women (both *ps* < .01).

Table 2
Correlations Between Variables Among White (Above The Diagonal) and Black (Below the Diagonal) Women

Variable	1	2	3	4	5	6	7	8	9	10
1. EDI-B	—	.60**	.66**	-.21	-.15	.17	.43**	-.06	.51**	.21
2. EDI-BD	.42**	—	.73*	-.19	.12	-.13	.62**	-.08	.63**	.11
3. EDI-DFT	.62**	.73**	—	-.33**	-.01	-.33**	.40**	-.27*	.55**	.03
4. Ethnic group ideal	.11	.16	.09	—	-.12	.78**	.09	.67**	-.29**	.02
5. Family income	.08	.12	.12	-.22*	—	-.01	.03	-.09	-.10	-.01
6. Mainstream ideal	-.10	-.10	-.17	.42**	-.16	—	.17	.72**	-.18	-.09
7. Perceived body shape	.28**	.61**	.51**	.41**	.02	.19*	—	.37**	.41**	-.02
8. Personal ideal	-.12	-.01	-.10	.50**	-.18	.47**	.53**	—	-.19	.01
9. RSE	.42**	.36**	.42**	-.14	.10	-.22*	.03	-.33**	—	.14
10. SAFE	.34**	.16	.21*	.08	.09	-.16	-.02	-.13	.33**	—

Note. EDI = Eating Disorder Inventory (Garner et al., 1983); EDI-B = bulimia subscale of the EDI; EDI-BD = body dissatisfaction subscale of the EDI; EDI-DFT = drive for thinness subscale of the EDI; family income = household income for the participant's family of origin; ethnic group ideal, mainstream ideal, perceived body shape, and personal ideal = scores based on the Stunkard Body Figure Scale (BFS; Stunkard et al., 1983); RSE = Rosenberg Self-Esteem Scale (Rosenberg, 1965); SAFE = Societal Attitudinal Familial and Environmental Acculturative Stress Scale (Padilla et al., 1985).

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

Discrepancies With Cultural Ideals

Correlations between ethnic group ideal and mainstream group ideal were examined for each group. The correlation between the two perceived body ideals was highest among White women ($r = .78, p < .001$), second highest among Latinas ($r = .60, p < .001$), and lowest among Black women ($r = .42, p < .001$). Next, the discrepancy score between each participant's perceived body shape and perceived ethnic group ideal body shape was computed along with a discrepancy score between each participant's perceived body shape and perceived mainstream ideal body shape.

Variance inflation factor (VIF) and tolerance statistics were examined among all potential predictors and covariates, and were determined not to be indicative of multicollinearity (i.e., all VIF statistics were less than 10 and all tolerance statistics were greater than .2). Self-esteem scores were predictive of all three EDI subscales for both the Latina and Black participant groups, but family income was not. Thus, only self-esteem was entered as a covariate of any analysis involving an EDI subscale.

For each group (i.e., Latinas and Black women), three regression analyses were computed to test whether the discrepancy between perceived body shape and perceived mainstream ideal body shape would be more predictive of eating disorder symptoms than the discrepancy between perceived body shape and perceived ethnic group ideal body shape. For each group, EDI-B, EDI-BD, and EDI-DFT were used as the dependent variables in the three regression analyses. For each analysis, self-esteem was entered as a covariate in Step 1. Both discrepancy scores were entered simultaneously in Step 2.

Results for Black women are presented in Table 4. For the EDI-B scale, adding the discrepancy terms into the model conferred an increase in variance accounted for; however, examination of the coefficients indicates that, after controlling for self-esteem, neither discrepancy variable significantly contributed to the model. For the EDI-BD scale, adding the discrepancy terms into the model at step two also conferred an increase in variance accounted for, and both discrepancy scores were significant predictors of EDI-BD after controlling for self-esteem. For the EDI-DFT scale, adding the discrepancy terms

Table 3
Correlations Between Variables Among Latinas

Variable	1	2	3	4	5	6	7	8	9	10
1. EDI-B	—									
2. EDI-BD	.50**	—								
3. EDI-DFT	.67**	.64**	—							
4. Ethnic group ideal	-.01	.05	-.06	—						
5. Family income	.12	-.07	.09	.11	—					
6. Mainstream ideal	-.19	.04	-.12	.60**	-.18	—				
7. Perceived body shape	.28*	.56**	.39**	.30*	-.05	.16	—			
8. Personal ideal	-.18	.10	-.18	.53**	-.22	.66**	.44**	—		
9. RSE	.57**	.50**	.55**	.20	.10	-.11	.44**	-.03	—	
10. SAFE	.29*	.23	.39**	.09	-.11	.08	.18	.06	.37**	—

Note. EDI = Eating Disorder Inventory (Garner et al., 1983); EDI-B = bulimia subscale of the EDI; EDI-BD = body dissatisfaction subscale of the EDI; EDI-DFT = drive for thinness subscale of the EDI; family income = household income for the participant's family of origin; ethnic group ideal, mainstream ideal, perceived body shape, and personal ideal = scores based on the Stunkard Body Figure Scale (BFS; Stunkard et al., 1983); RSE = Rosenberg Self-Esteem Scale (Rosenberg, 1965); SAFE = Societal Attitudinal Familial and Environmental Acculturative Stress Scale (Padilla et al., 1985).

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

Table 4
Summary of Regression Analyses for Black Women

Variable	R ²	R ² Δ	B	SE B	β
DV = EDI Bulimia					
Step 2	.23	.06*			
Mainstream ideal discrepancy			.78	.42	.23
Cultural ideal discrepancy			.05	.52	.01
DV = EDI Body Dissatisfaction					
Step 2	.46	.33**			
Mainstream ideal discrepancy			2.89	.85	.36**
Cultural ideal discrepancy			2.49	1.05	.25*
DV = EDI Drive for Thinness					
Step 2	.43	.16**			
Mainstream ideal discrepancy			2.33	.67	.38**
Cultural ideal discrepancy			1.29	.83	.17

Note. EDI = Eating Disorders Inventory (Garner, Olmstead, & Polivy, 1983); DV = dependent variable; mainstream ideal discrepancy = discrepancy between participant's perceived body shape and her impression of the body ideal in mainstream U.S. culture (perceived body shape minus U.S. mainstream ideal); cultural ideal discrepancy = discrepancy between participant's perceived body shape and her impression of the body ideal for her cultural background (perceived body shape minus ethnic group ideal).

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

into the model in step two also conferred an increased in variance accounted for. The difference between perceived body shape and perceived mainstream ideal body shape was a significant predictor of EDI-DFT scores, whereas the difference between perceived current body shape and ethnic group ideal body shape was not.

Results for Latinas are presented in Table 5. For the EDI-B scale, the addition of the two discrepancy variables did not produce a model that was significantly better than the model including only self esteem. For the EDI-BD scale, adding the discrepancy terms into the model in step two conferred an increase in variance

accounted for. In this model the difference between perceived body shape and perceived ethnic group ideal was a significant predictor, whereas the difference between perceived body shape and perceived mainstream ideal body shape was not a significant predictor of EDI-BD. Finally, for the EDI-DFT scale, adding the discrepancy terms into the model in step two also conferred an increased in variance accounted for. In this model the difference between perceived current body shape and perceived ethnic group ideal body shape was a significant predictor, whereas the difference between perceived current body shape and perceived mainstream ideal body shape was not.

Table 5
Summary of Regression Analyses for Latinas

Variable	R ²	R ² Δ	B	SE B	β
DV = EDI Bulimia					
Step 2	.33	.01			
Mainstream ideal discrepancy			.23	1.13	.04
Cultural ideal discrepancy			.43	1.09	.07
DV = EDI Body Dissatisfaction					
Step 2	.39	.14**			
Mainstream ideal discrepancy			-1.75	1.88	-.18
Cultural ideal discrepancy			5.20	1.80	.51**
DV = EDI Drive for Thinness					
Step 2	.39	.09**			
Mainstream ideal discrepancy			-.92	1.69	-.10
Cultural ideal discrepancy			3.61	1.62	.39*

Note. EDI = Eating Disorders Inventory (Garner, Olmstead, & Polivy, 1983); mainstream ideal discrepancy = discrepancy between participant's perceived body shape and her impression of the body ideal in mainstream U.S. culture (perceived body shape minus U.S. mainstream ideal); cultural ideal discrepancy = discrepancy between participant's perceived body shape and her impression of the body ideal for her cultural background (perceived body shape minus ethnic group ideal).

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

Acculturative Stress

Three additional pairs of regression analyses were conducted to test the hypothesis that, among Black women and Latinas, acculturative stress would be predictive of eating disorder symptoms. In each analysis, self-esteem was entered into the first step, and acculturative stress was entered in the second step. In the first regression, the EDI-B subscale score was used as the dependent variable. Level of acculturative stress predicted bulimic symptoms among Black women, $t(115) = 3.07$, $\beta = .26$, $p < .01$, but not among Latinas, $t(70) = 1.0$, $\beta = .11$, $p = .31$. In the second regression, the EDI-DFT score was used as the dependent variable. Acculturative stress predicted EDI-DFT scores among Latinas, $t(70) = 2.22$, $\beta = .24$, $p < .05$, but not among Black women ($p = .20$). Acculturative stress did not significantly predict EDI-BD scores for either group (both $ps > .05$).

Discussion

The current study examined eating disorder symptoms and related variables among Latina, Black, and White college women. Our first hypothesis, that Latino and Black cultures espouse larger body shape ideals for women than the majority U.S. culture, was supported. White women selected slimmer body shape ideals for their ethnic group than Latinas or Black women. The fact that Latinas selected significantly thinner ethnic group body ideals than Black women, suggests clustering all “non-White” women together is not appropriate because it obscures ethnic group differences in putative risk factors for eating pathology. Regarding personal ideal body shape, there were no significant differences between Latinas and White women, but both groups selected significantly slimmer personal body shape ideals than Black women. Finally, there were no significant differences between ethnic groups in the selection of the mainstream U.S. ideal, which supports the notion that Latinas and Black women have substantial exposure to the thin U.S. ideal along with White women.

In terms of eating disorder symptoms, there were no significant differences between Latinas and White women on the EDI-DFT and EDI-BD scales, suggesting comparable levels of self-reported body dissatisfaction and drive for thinness. Meanwhile, Black women scored significantly lower on both of these scales than Latinas and White women. White women scored significantly higher on the EDI-B scale than Latinas, who, in turn, scored significantly higher on the EDI-B than Black women. The eating disorder symptom data, along with the personal ideal body shape data, suggest that Black women may be relatively protected from eating disorder symptoms as compared to Latinas and White women at the current time.

Our second hypothesis, that the discrepancy between perceived body shape and perceived ideal body shape for U.S. mainstream culture would be more predictive of eating disorder symptoms among Latinas and Black women than the discrepancy between perceived body shape and perceived body shape ideal for their own ethnic group, was only partially supported by the data. In terms of body dissatisfaction, both discrepancies predicted EDI-BD scores for Black women, but only the discrepancy between perceived body shape and perceived ethnic group ideal significantly predicted body dissatisfaction among Latinas. With regard to drive for thinness, the discrepancy between perceived body shape and per-

ceived mainstream ideal was a significant predictor among Black women. Among Latinas, the opposite was true: only the discrepancy between perceived body shape and ethnic group ideal predicted drive for thinness. Generally, the findings suggest that the discrepancy between perceived ethnic group ideal and perceived body shape is more frequently related to eating disorder symptoms among Latinas, while the discrepancy between perceived body shape and perceived mainstream ideal is more frequently related to eating disorder symptoms among Black women.

Finally, we predicted that higher levels of acculturative stress would be associated with higher rates of eating disorder symptoms among Black and Latina women. This hypothesis was also partially supported, in that greater levels of acculturative stress predicted higher levels of drive for thinness among Latinas and bulimic symptoms among Black women. Acculturation, however, as measured by SMAS, did not significantly predict eating disorder symptoms. This finding is in need of replication, but it suggests that acculturative stress, rather than acculturation, may be most related to eating disorder symptoms. Furthermore, Black women may have a tendency to cope with acculturative stress through bulimic behaviors, while Latina women may be more prone to coping with acculturative stress by attempting to become thinner. It is possible that both drive for thinness and bulimic behaviors function as escape behaviors (Heatherton & Baumeister, 1991), designed to alleviate psychological distress associated with acculturative stress. These behaviors may also serve as maladaptive coping strategies that are used in an attempt to fit into the mainstream through attainment of the thin ideal. Future research testing these possibilities may clarify the nature of the relationships between acculturative stress and eating disorder symptoms among women in ethnic minority groups.

Our findings should be evaluated in light of the strengths and weaknesses of the study. The strengths of the study include the examination of eating disorder variables in a group of Latina undergraduate women that are directly compared to Black and White undergraduate women. Previous studies examining relationships between cultural variables and eating disorder symptoms have generally excluded Latinas, had an underrepresentation of Latinas in their sample, or have combined Latinas with other ethnic minority groups (e.g., forming one “non-White” group). A limitation of our sample may be that our participants came from a predominantly White university. Thus, Black women and Latinas in this sample may be more frequently exposed to acculturative experiences compared to a sample of young women of ethnic minority groups in the general population. Thus, the levels of acculturation and acculturative stress in this sample may not be entirely representative of young Black women and Latinas. However, if undergraduate women from ethnic minority groups who attend a predominantly White university experience higher levels of acculturative stress than those who attend a university with a student body that consists primarily of other members of their ethnic group (e.g., Black women attending a historically Black college), then they may represent a population that is in particular need of study. Other limitations include grouping all Latinas together rather than examining disordered eating separately by countries of origin (e.g., Mexican Americans may differ from Cuban Americans with regards to body shape ideals). Future research should seek to recruit samples with sufficient power to

examine potential differences between Latinas by their family's country of origin.

Our findings underscore the importance of considering cultural variables in the assessment and diagnosis of eating disorders. First, it is clear that women from all ethnic groups are vulnerable to the development of eating pathology. Second, clinicians should be sensitive to, and assess for, cultural variables that may put ethnic and racial minority women at particular risk for eating disorders (e.g., their perceived body shape is discrepant from their ethnic group's ideal body shape in the case of Latinas). These findings also have implications for the treatment of eating disorders. For instance, it may be helpful to use cognitive-behavioral exercises (e.g., Fairburn et al., 2008) that specifically challenge thoughts about minority status (e.g., "here's one way it's not helpful to be different from my culture of origin,") when working with women from ethnic minority groups. Finally, it may be beneficial to use interventions that couple standard psychoeducation about the health risks of internalizing the overly thin ideal with discussions about the potential value of maintaining some values of one's culture of origin.

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