Cultural Diversity and Ethnic Minority Psychology

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CITATION
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**Objectives:** Limited research exists examining the association of maternal weight-, shape-, and size-related criticism with disordered eating pathology across racial and ethnic groups. **Method:** The sample consisted of 392 undergraduate females and 368 undergraduate males for a total of 760 individuals. Disordered eating pathology, body dissatisfaction, and maternal criticism were assessed in 484 White, 134 Latinx, and 142 Asian American undergraduates. Hierarchical regression, correlation, and t-test analyses were conducted for each ethnic group. **Results:** Among all three groups, body dissatisfaction, maternal criticism, and gender were significantly associated with disordered eating pathology. In addition, disordered eating and maternal criticism were greater among female undergraduates than among male undergraduates across all groups. However, body dissatisfaction did not differ significantly between female and male undergraduates in any of the three racial and ethnic groups. Findings from this study suggest that individual body dissatisfaction and maternal criticism may be differentially linked with disordered eating pathology across racial and ethnic groups. Among Whites and Latinx, body dissatisfaction was more strongly associated with disordered eating pathology than was perceived maternal criticism. However, among Asian Americans, perceived maternal criticism was more strongly associated with disordered eating pathology than was body dissatisfaction. **Conclusions:** Maternal criticism was the most saliently linked with disordered eating pathology among Asian Americans. Findings from this study speak to individual and familial factors impacting disordered eating across racial and ethnic groups. Additionally, this study highlights the potential role of culture on disordered eating, particularly self-construal and collectivistic and individualistic orientations.

**Keywords:** disordered eating, maternal criticism, body dissatisfaction, culture, ethnicity

Eating disorders are a serious public health issue associated with a wide variety of medical complications, psychosocial impairment, and comorbid psychopathology (Smink, van Hoeken, & Hoek, 2012). Disordered eating, which is defined as including a range of subclinical, maladaptive eating behaviors (e.g., restriction or purging; American Psychiatric Association, 2013), can be conceptualized along a continuum and is associated with significant distress, dysfunction, as well as the development of clinically significant eating disorders (Polivy & Herman, 1985; Striegel-Moore, Silberstein, & Rodin, 1986). In the past, disordered eating pathology has been largely characterized as culture bound and affecting primarily female adolescents and adults, however, more recent research indicates that disordered eating pathology occurs in non-Western cultures, among racial and ethnic minorities in the United States, and across genders (Chandra, Abbas, & Palmer, 2012; Chisuwa & O’Dea, 2010; Eddy, Hennessey, & Thompson-Brenner, 2007; Jackson & Chen, 2010; Lee, Ng, Kwok, & Fung, 2010; Marques et al., 2011; Murray et al., 2017).

While disordered eating pathology has been shown to occur across a wide range of racial and ethnic groups and genders, disordered eating may also differ in prevalence across groups. For example, bulimia nervosa has been found to be more prevalent in Latinx and Black populations than among White populations (Marques et al., 2011) and Asian Americans are more likely than Whites are to report binge eating behaviors (Lee-Winn, Mendelson, & Mojtahed, 2014). Additionally, findings from epidemiological research suggest that, while disordered eating is more common among female young adults, male young adults make up a substantial proportion of individuals with disordered eating pathology, especially in community settings (Mitchison, Mond, Siewa-Younan, & Hay, 2013). As disordered eating pathology has been shown to impact individuals of diverse genders, races, and ethnicities (Hudson, Hiripi, Pope, & Kessler, 2007; Perez & Plasencia, 2017), research addressing its mechanisms of development across groups is greatly needed.

**Body Dissatisfaction**

Previous research, particularly research conducted with college samples, suggests that individual perceptions of body image contribute to disordered eating pathology and the maintenance of eating disorders (Perez & Joiner, 2003). Body dissatisfaction, which is conceptualized as negative cognitions, subjective perceptions, and overevaluation of body shape, size, and weight, is considered central in the maintenance of disordered eating pathol-
ology (American Psychiatric Association, 2013; Fairburn, 2008; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Body dissatisfaction has also been shown to moderate the influence of other factors contributing to disordered eating pathology (Stice & Desjardins, 2018). Specifically, body dissatisfaction has been shown to strengthen the relationship between low body mass index and the development of anorexia nervosa as well as amplify the relationship between overeating and the development of bulimia nervosa (Stice & Desjardins, 2018). Furthermore, body dissatisfaction has been found to be the most salient correlate of binge eating disorder (Stice & Desjardins, 2018).

Body dissatisfaction is thought to stem largely from sociocultural pressures to adhere to specific standards of attractiveness and to arise from experiences of perceived or physical deviation from sociocultural body ideals (e.g., the thin body ideal or muscular body ideal; Calzo et al., 2016; Striegel-Moore et al., 1986; Thompson et al., 1999; Wertheim, Paxton, Schultz, & Muir, 1997). In conceptualizing these ideas, the tripartite influence model posits that body dissatisfaction and disordered eating pathology are impacted by family, peers, and societal media messages (Keery, van den Berg, & Thompson, 2004; Rodgers & Chabrol, 2009). Currently, substantial research exists examining the influence of peers and media on the development of disordered eating pathology (Keery et al., 2004). However, less research exists examining the association between familial pressure and disordered eating pathology. Furthermore, a paucity of research currently exists exploring the associations between specific types of familial pressure (i.e., maternal or paternal pressure) and disordered eating pathology, especially among racial and ethnic minority groups and among males. Addressing specific types of familial pressure and examining the role of offspring gender is valuable to increase understanding of how the tripartite influence model can be applied and conceptualized in work with diverse populations and contexts.

**Familial Criticism**

Familial pressure and messages around eating, body shape, and body size are powerful and influential in the development of disordered eating pathology. These types of messages can also be pervasive. For example, one study found that 58% of adolescent females reported experiences of weight-related teasing by family members and 45% reported that their mothers encouraged them to diet (Neumark-Sztainer et al., 2010). Parental figures, in particular, can model body dissatisfaction, overevaluation, and disordered eating behaviors for offspring (Attie & Brooks-Gunn, 1989; Byely, Archibald, Graber, & Brooks-Gunn, 2000; Gowers & Shore, 2001; Littleton & Ollendick, 2003). Alternatively, parental attitudes about offspring body weight, shape, and size can be actively conveyed through teasing, criticism, shaming, and encouragement to diet, lose weight, or change body shape or size (Thompson et al., 1999). Verbal encouragement from family members to control body weight and size has been shown to be a potent predictor of body dissatisfaction (Kluck, 2010) and dieting (Keel, Heatherton, Harnden, & Horning, 1997). In fact, a meta-analysis comparing the influences of parental modeling behavior with active parental criticism on disordered eating pathology suggests that active criticism (e.g., teasing or encouragement to alter body shape or size) may be a stronger predictor than modeling behavior (Rodgers & Chabrol, 2009). As such, active parental criticism is an important variable to consider in the development and maintenance of disordered eating pathology.

**Parent and Offspring Gender**

Parental criticism negatively impacts male and female offspring, but potentially more so for female offspring than male offspring. For example, parental criticism to change body weight and shape has been shown to predict body dissatisfaction in both female and male offspring (Green & Pritchard, 2003). Another study indicates that, among both male and female offspring, internalization of body ideals and appearance comparison mediated the relationship between parental body-related comments and disordered eating pathology (Rodgers, Paxton, & Chabrol, 2009). However, female offspring generally report higher levels of maternal comments regarding body weight and shape (Rodgers, Faure, & Chabrol, 2009), criticism (Baker, Whisman, & Brownell, 2000), weight loss discussions (Vincent & McCabe, 2000), and paternal feedback regarding appearance (Schwartz, Phares, Tantleff-Dunn, & Thompson, 1999) than their male counterparts do. Additionally, parental criticism has been found to explain more variance in body dissatisfaction among female offspring than among male offspring (Rodgers et al., 2009). As such, parental criticism may be more strongly associated with disordered eating pathology among female offspring than among male offspring.

Research suggests that both parents can exert an influence on offspring body dissatisfaction (Rodgers & Chabrol, 2009), but female parents may exert a greater influence. To demonstrate, one study of female offspring found that maternal weight-related criticism was more strongly associated with disordered eating pathology than paternal weight-related criticism (Neumark-Sztainer et al., 2010). Another study suggests that female parents may exert greater influence over male offspring body image when compared with other sources of sociocultural pressure (Ricciardelli, McCabe, & Banfield, 2000). However, further research exploring the association between maternal criticism and disordered eating pathology is needed to replicate previous findings.

**Race and Ethnicity**

Further, little to no research exists examining maternal criticism around appearance, body weight, shape, and size with disordered eating pathology across racial and ethnic groups. This relationship may differentially vary across cultures for several reasons. First, socially determined body image ideals, which may be differentially linked with disordered eating pathology, have been shown to vary across racial and ethnic groups (Calzo et al., 2016; Markey, 2004; Striegel-Moore et al., 1986; Thompson et al., 1999; Wertheim et al., 1997). Second, racial and ethnic groups in the United States vary on self-construal (i.e., the extent to which individuality or interdependent social connectedness is valued), which, in turn, may be associated with disordered eating pathology (Chang, Yu, & Kahle, 2014). Research has found Western cultures tend to have higher rates of individuality while groups from Asia, Africa, South America, and the Pacific Island region are more likely to orient toward interdependent self-construal (Markus & Kitayama, 1991). Third, racial and ethnic groups in the United States can also differ on their collectivistic and individualistic orientation. Individuals in a collectivistic society value subordi-
nating personal goals to those of an in group, whereas individual-ism prioritizes individual values over in-group goals (Singelis, 1994). The influence of maternal criticism on disordered eating pathology could vary between cultures that value individuality or social connectedness and collectivism. It is important to note that racial and ethnic identity are often used in the literature as proxies to examine these cultural factors, but are not foolproof representations of collectivistic-individualistic orientation and self-construal (Markus & Kitayama, 1991).

Both Asian American and Latinx cultures have been associated with a collectivist and interdependent orientations, particularly with family. For example, studies show Asian cultures report family oriented interdependence (Chan, 1991), with many traditions that emphasize respect, commitment, and solidarity with family (Ho, 1981). Further, Asian American young adults report stronger values and expectations regarding their obligation and duty to respect and support their families than European Americans (Fuligni, Tseng, & Lam, 1999; McLaughlin & Braun, 1998). Similarly, within Latinx cultures familial devotion and loyalty are often emphasized values (Chilman, 1993) with identity often rooted in ancestors, community, environment, and other collective contexts (Comas-Díaz, 2006). Familism, a Latinx cultural value, refers to the importance of strong loyalty, closeness, harmony, and cohesiveness within familial and kinship relationships (Comas-Díaz, 2006). Like Asian American young adults, Latinx young adults may also have stronger values and expectations regarding assisting, respecting, and supporting their families compared with their European American young adult counterparts (Fuligni et al., 2003).

Given the salient value of family within Asian and Latinx Americans, it is possible that maternal perceptions of one’s body weight, shape, or size may be more strongly linked with disordered eating pathology than individual perceptions of body image. Indeed, one study assessing the influence of media, peers, and family found that familial pressure to achieve thinness was particularly linked with disordered eating pathology and appearance evaluation among Latinx females (Ordaz et al., 2018). In addition, Latinx and Asian American females report higher prevalence of familial weight-related teasing than White females do (van den Berg, Neumark-Sztainer, Eisenberg, & Haines, 2008), suggesting that certain racial and ethnic groups may experience more familial criticism. On the contrary, within independent and individualistic cultures, individual perceptions of body weight, shape, and size may be more associated with disordered eating pathology than maternal perceptions.

Accordingly, the goal of the current study was to examine how maternal criticism and individual body dissatisfaction may be differentially associated with disordered eating pathology among Latinx, Asian American, and White individuals. Consistent with the theoretical and limited empirical research, it was hypothesized that maternal criticism would be more strongly associated with disordered eating pathology among individuals from collectivistic cultures (i.e., Latinx and Asian Americans) than among individuals from individualistic cultures (i.e., Whites). We also sought to explore this association across gender. Given existing research suggesting that female offspring may experience more maternal criticism (Baker et al., 2000; Vincent & McCabe, 2000) and greater sociocultural appearance-related pressure (Rodgers & Chabrol, 2009) than males do, we hypothesized that the relationship between body dissatisfaction, maternal criticism, and disordered eating pathology would be stronger among female undergraduates than among male undergraduates across racial and ethnic groups. Finally, we hypothesized that maternal criticism would be more strongly associated with disordered eating pathology among those with greater body dissatisfaction.

Method

Participants and Procedure

Undergraduate students (N = 1,337) were recruited from a large, public, Southwestern university in the United States as part of a larger study assessing health behaviors, social networks, and personality. Participants who were missing responses on two or more items addressing maternal criticism, body dissatisfaction, and disordered eating (n = 446) and who were older than the age of 23 years (n = 34) were excluded from the sample. Participants were asked to report their race/ethnicity with options being White, Latinx, Asian American, Black, or other. Individuals who identified as Black or other (e.g., individuals who identified as Native American, Middle Eastern, or multiracial) were excluded from the sample due to small group sizes (n = 91). The ethnic and racial composition of the remaining sample included 484 White (63.7%), 134 Latinx (17.6%), and 142 Asian American individuals (18.7%). Individuals were asked to report their gender identity with options being female, male, and other. Individuals who identified as other (e.g., transgender, nonbinary, genderqueer) were excluded from the sample (n = 6). The resultant total sample (N = 760) included 244 White females, 240 White males, 73 Latinx females, 61 Latinx males, 75 Asian American females, and 67 Asian American males. Both native and nonnative English speakers were included, however, the majority of the sample consisted of native English speakers (82.9%). Among native English speakers, the racial and ethnic composition was 98.6% of Whites, 69.4% of Latinx, and 42.3% of Asian Americans. The sample was asked to report their perceived social status with 6.2% endorsing upper class, 36.3% upper-middle class, 40.5% middle class, 12.4% lower-middle class, 4.1% working class, and 0.1% other. Students enrolled in introductory psychology courses were invited to complete an online survey for course credit. After providing written online consent, respondents completed online self-report questionnaires. This study was approved by the university institutional review board.

Measures

Disordered eating. Endorsement of disordered eating pathology was assessed through the Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Belgin, 1994; Grilo, Reas, Hopwood, & Crosby, 2015). The EDE-Q, which is a commonly used self-report measure for assessing disordered eating pathology, is adapted from the Eating Disorder Examination (EDE; Fairburn & Cooper, 1993), a widely regarded diagnostic interview. EDE-Q scores have been shown to be highly correlated with the EDE (Fairburn, 2008). Participants received eight items from three subscales assessing endorsement of disordered eating attitudes and pathology: Eating Concerns (e.g., “Have you had a definite fear of losing control over eating?”), Shape Concerns (e.g., “How dissatisfied have you been with your shape?”), and Weight Concerns...
(e.g., “Has your weight influenced how you think about yourself as a person?”). Items from each subscale were scored on a Likert scale ranging from 1 (not at all) to 4 (markedly) with total scores averaged across items. Previous research indicates that the EDE-Q can be used reliably and validly among college populations (Berg, Peterson, Frazier, & Crow, 2012; Fairburn, 2008; Luce, Crowther, & Pole, 2008). In the current study, each subscale was assessed separately for reliability. Within the Eating Concerns subscale, \( \alpha = .48 \) White, .42 Latinx, .56 Asian Americans, .52 men, and .46 women. Within the Shape Concerns subscale, \( \alpha = .90 \) Whites, .90 Latinx, .89 Asian Americans, .87 men, and .88 women. Within the Weight Concerns subscale, \( \alpha = .78 \) Whites, .83 Latinx, .76 Asian Americans, .74 men, and .79 women. The global EDE-Q was also highly reliable, .90 Whites, .91 Latinx, .90 Asian Americans, .89 men, and .90 women. For all analyses, global EDE-Q was used.

**Maternal criticism.** Currently, there is no measure assessing maternal criticism on appearance, weight, shape and size. The Sociocultural Attitudes Toward Appearance Questionnaire—4 contains a family pressure subscale (Thompson et al., 2011) that assesses the extent to which an individual feels pressure from family to improve appearance, shape and reduce weight. For example “I feel pressure from my family members to look thinner.” Family is defined as parents, siblings, and relatives. All four items of this subscale were used with mother replacing the word “family members” in each item. In addition, the three items from the Family Experiences Related to Food—Mother Scale (Kluck, 2008, 2010) were also used. These three items assess the extent a mother has criticized weight/size, and encouraged dieting and other weight control behaviors (see Kluck, 2010 for a list of the items). Both of the subscales use the same Likert scale ranging from 1 to 5 with higher scores indicating more criticism and pressure. This scale was found to be highly reliable among Whites (\( \alpha = .90 \)), Latinx (\( \alpha = .88 \)), and Asian Americans (\( \alpha = .95 \)), and across genders: men (\( \alpha = .88 \)) and women (\( \alpha = .92 \)).

**Body dissatisfaction.** Body dissatisfaction was assessed with the short version of the Body Parts Satisfaction Scale for Males (Frederick, Hatfield, Bohrstedt, & Berscheid, 2014; McFarland & Petrie, 2012) and Body Parts Satisfaction Scale for Females (Frederick et al., 2014; Petrie, Tripp, & Harvey, 2002). Participants were asked to rate how satisfied they felt with various body parts including “leanness/muscularity of stomach/abdomen” and “overall leanness of body.” Each item was scored on a Likert scale with higher scores indicative of greater body dissatisfaction. Scores were averaged across items. Both measures have been shown to yield reliable and valid scores with undergraduate males and females (Frederick et al., 2014; McFarland & Petrie, 2012; Petrie et al., 2002). In the current sample, these measures were found to be highly reliable among White (\( \alpha = .95; .87 \)), Latinx (\( \alpha = .96; .89 \)), and Asian American males and females (\( \alpha = .90; .87 \)), respectively.

**Data Analytic Strategy**

Given that maternal criticism included items from two validated scales, a factor analysis was conducted to confirm this measure assessed one unified construct. Using SPSS 23, a confirmatory factor analysis was conducted using maximum likelihood with a direct oblique rotation for correlated items, with an examination of Kaiser-Meyer-Olkin (Cerny & Kaiser, 1977), and Bartlett’s test of sphericity (Kaiser, 1960). Factor determination used factors with eigenvalues of 1.0 or greater, and a scree plot (Cattell, 1966). Items with loadings higher than .40 were retained.

To address missing data, mean imputation was used for participants with one missing item per measure. Independent sample \( t \) tests were conducted to determine whether there were any existing differences between participants excluded from the analyses and the current sample. There were no significant differences found in disordered eating, maternal criticism, and body dissatisfaction (\( p > .56 \)).

To assess the association between body dissatisfaction, maternal criticism, and gender on disordered eating (i.e., global EDE-Q), a hierarchical regression was computed separately for each racial and ethnic group (i.e., White, Latinx, and Asian American). For each hierarchical regression and separately for each racial and ethnic group, body dissatisfaction, maternal criticism, and dummy-coded gender were simultaneously entered as independent variables (Model 1). Then, interaction terms (i.e., Body Dissatisfaction × Maternal Criticism, Body Dissatisfaction × Gender, and Maternal Criticism × Gender) were simultaneously entered as independent variables with disordered eating pathology as the dependent variable (Model 2).

Post hoc analyses were computed to assess the statistical power of conducting hierarchical regression analyses with three variables in Model 1 and three additional variables in Model 2. Using a medium effect size of .15, an alpha of .05, and the smallest racial and ethnic group (Latinx; \( n = 134 \)), the estimated power for the regression was 0.973 for the addition of Model 2, indicating sufficient power for these analyses.

**Results**

**Maternal Criticism Confirmatory Factor Analysis**

The Kaiser-Meyer-Olkin measure of sampling adequacy, which is the degree of common variance among the items was .92, and well above the recommended value (.70; Cerny & Kaiser, 1977). Bartlett’s test of sphericity was found to be significant, \( \chi^2(21) = 3001.91, p < .001 \). Using Kaiser’s eigenvalue rule of thumb, one factor had an eigenvalue greater than 1.0, which was further confirmed by visual inspection of a scree plot (Cattell, 1966; Kaiser, 1960). The one factor accounted for 66.43% of the variance. The maternal criticism scale consisted of seven items, and all items loaded highly on the factor with loadings ranging from .65 to .84 (Table 1); and were retained. All items were moderately and significantly correlated with each other (see Table 1). The positive results from the factor analysis confirm that the items of the maternal criticism scale create one unified factor.

**Correlation and \( T \)-Test Analyses**

As shown in Table 2, body dissatisfaction and disordered eating were positively correlated among Whites, Latinx, and Asian Americans. Maternal criticism was correlated with body dissatisfaction among Whites, Latinx, and Asian Americans. Finally, maternal criticism was also positively correlated with disordered eating among Whites, Latinx, and Asian Americans.

As shown in Table 3, within the White, Latinx, and Asian American groups, disordered eating and maternal criticism were
greater among female undergraduates than among male undergraduates. However, body dissatisfaction did not differ significantly between female and male undergraduates in any of the three racial and ethnic groups.

**Regression Analyses**

**Whites.** As displayed in Table 4, Model 1 accounted for 40% of the total variance in disordered eating pathology among the White group [$R^2 = .40, F(3, 480) = 108.23; f^2 = .68, p < .0001$]. Body dissatisfaction [$r(483) = 12.07; \beta = .21, p < .0001$], maternal criticism [$r(483) = 6.78; \beta = .05, p < .0001$], and gender [$r(483) = 6.38; \beta = .27, p < .0001$] were all significant predictors of disordered eating. Model 2 included the two-way interactions between the terms. The overall regression equation for Model 2 was significant for the White group. The overall equation for Model 3 was significant, accounting for 43% of total variance [$R^2 = .43, F(7, 476) = 52.33; f^2 = .75, p < .0001$]. However, the three-way interaction between these terms did not significantly predict disordered eating.

**Latinx.** Among the Latinx group, the overall regression equation for Model 1 accounted for 40% of total variance [$R^2 = .41, F(3, 130) = 30.62; f^2 = .71, p < .0001$]. Body dissatisfaction [$r(133) = 7.70; \beta = .26, p < .0001$], maternal criticism [$r(133) = 2.03; \beta = .03, p < .05$], and gender [$r(133) = 3.69; \beta = .33, p < .0001$] were all significant predictors of disordered eating. Model 2 included the two-way interactions. The overall regression equation for Model 2 was significant for the Latinx group, accounting for 41% of total variance [$R^2 = .44, F(6, 127) = 16.38; f^2 = .77, p < .0001$]. However, no interactions between body dissatisfaction, maternal criticism, or gender were found to significantly predict disordered eating.

**Asian American.** Among the Asian American group, the overall regression equation for Model 1 was significant, accounting for 32% of total variance in disordered eating [$R^2 = .34, F(3, 138) = 23.17; f^2 = .50, p < .0001$]. Body dissatisfaction [$r(141) = 3.19; \beta = .14, p < .01$], maternal criticism [$r(141) = 5.57; \beta = .06, p < .0001$], and gender [$r(141) = 2.12; \beta = .19, p < .05$] were all significant predictors of disordered eating. The overall regression equation for Model 2, which included the two-way interactions, was significant accounting for 32% of total variance [$R^2 = .35, F(6, 135) = 12.22; f^2 = .54, p < .0001$]. None of the interaction terms significantly predicted disordered eating among Asian Americans (see Table 4).

**Discussion**

The current study sought to assess how individual body dissatisfaction, maternal criticism, and gender are individually and
jointly associated with disordered eating pathology across White, Latinx, and Asian American individuals. Results from the current study generally support our hypotheses. Importantly, findings from this racially and ethnically diverse sample of undergraduates were consistent with existing literature; body dissatisfaction and disordered eating were positively associated with one another, and disordered eating was correlated with female gender (Muth & Cash, 1997). Additionally, these findings confirm previous work suggesting that maternal criticism is an important correlate of disordered eating pathology among both male and female offspring (Kluck, 2010; Rodgers & Chabrol, 2009) and extend these findings across racial and ethnic groups.

Interestingly, in the current study, individual body dissatisfaction and maternal criticism were differentially associated with disordered eating pathology across racial and ethnic groups. Among Whites and Latinx, body dissatisfaction was more strongly associated with disordered eating pathology than was maternal criticism. However, among Asian Americans, maternal criticism was more strongly correlated with disordered eating pathology than body dissatisfaction was. Consistent with previous literature (Chang et al., 2014; Singelis, 1994) and with our hypotheses, maternal criticism was most saliently linked with disordered eating pathology among Asian Americans.

This discrepancy across groups provides support for the role of culture on how individual body dissatisfaction and maternal criticism may be differentially associated with disordered eating pathology across racial and ethnic groups. Collectivistic and individualistic orientation and self-construal may account for this variation (Chang et al., 2014; Singelis, 1994). Differences in collectivistic-individualistic orientation and self-construal may account for this racially and ethnically diverse sample of undergraduates were consistent with existing literature; body dissatisfaction and disordered eating were positively associated with one another, and disordered eating was correlated with female gender (Muth & Cash, 1997). Additionally, these findings confirm previous work suggesting that maternal criticism is an important correlate of disordered eating pathology among both male and female offspring (Kluck, 2010; Rodgers & Chabrol, 2009) and extend these findings across racial and ethnic groups.

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It is notable that both models for the Asian American group accounted for less overall variance compared with the White and Latinx groups. This discrepancy suggests there may be other important factors that might uniquely contribute to disordered eating pathology among Asian Americans in addition to body dissatisfaction, maternal criticism, and gender. Additionally, Asian Americans reported significantly higher levels of maternal criticism than the other two groups, which could also contribute to discrepancies found. As such, more research is needed to more closely examine factors contributing to disordered eating pathology among Asian Americans.

As Latinx also have been shown to adhere to more collectivistic attitudes than Whites do (Markus & Kitayama, 1991), we also hypothesized that maternal criticism would be more strongly linked with disordered eating pathology among Latinx than among Whites, however, our findings did not support this hypothesis. It is possible that maternal criticism among Latinx may be less bothersome to offspring and thus may be less associated with disordered eating pathology. Indeed, some research has found that, compared with other racial and ethnic groups, Latinx adolescents report lower prevalence of being bothered by familial weight-based teasing (van den Berg et al., 2008). It is possible that, in Latinx cultures, maternal criticism may be interpreted as normative, affiliative, and contributing to closeness and familialismo, rather than interpreted as malicious and hurtful (Keltner, Capps, Kring, Young, & Heerey, 2001). This may lead to more positive emotional responses to maternal weight-, shape-, and size-related criticism. It is possible that emotional response to and interpretation of criticism, rather than simply criticism itself, may be linked with disordered eating pathology (van den Berg et al., 2012). Indeed, being bothered by familial teasing about weight has been linked with disordered eating pathology in adolescent females (Libbey, Story, Neumark-Sztainer, & Boutelle, 2008). It is also possible that body ideals in Latinx cultures may protect against maternal criticism. In Latinx cultures, physical health is often emphasized over appearance (Franko et al., 2012) and the culturally idealized Latina curvy body type, colloquially referred to as “gordibelua” (Perez, Ohrt, & Hoek, 2016), is valued in many Latinx cultures. However, further research is needed to explore all of these potential explanations for our findings.

Additionally, our hypothesis regarding the interaction between gender and maternal criticism was not supported. We hypothesized that the relationship between body dissatisfaction, maternal criticism, and disordered eating pathology would be stronger among female undergraduates than among male undergraduates across racial and ethnic groups. Female young adults have been found to be more likely to receive maternal body-related criticism than male young adults are (Baker et al., 2000; Vincent & McCabe, 2000) and parental criticism has been shown to explain more variance in body dissatisfaction among female young adults than among male young adults (Rodgers et al., 2009). This has been attributed to a gender-linked sociocultural context that places more emphasis on body shape and appearance in female young adults than in male young adults (Rodgers & Chabrol, 2009).

There are several potential explanations for our discrepant findings in the current study. It is possible that, as body image concerns and disordered eating pathology among males are becoming increasingly recognized and socially accepted (Murray et al., 2017), males are more likely to report disordered eating pathology without fear of stigma. On a different note, some previous research addresses maternal and paternal criticism jointly in its association with disordered eating pathology among male and female offspring. As the current study solely addressed maternal criticism, it is possible that the inclusion of paternal criticism may have yielded different results. Nevertheless, more research is needed to elucidate the role of offspring gender in the relationship between maternal criticism, body dissatisfaction, and disordered eating pathology.

It is important to note that the objective of this study was to explore the generalizability and differential association of maternal criticism with disordered eating across ethnic and racial groups and genders. As the tripartite influence model posits, body dissatisfaction and disordered eating pathology develop and are maintained by a host of factors including peer, media, and family pressure (Keery et al., 2004; Rodgers & Chabrol, 2009). Findings from the study suggest that, since body dissatisfaction, maternal criticism, and gender do not jointly account for all of the variance in disordered eating pathology, other mechanisms and factors should be considered. In particular, macro- and microenvironmental contexts are of noteworthy consideration (Bronfenbrenner & Morris, 2006). This is especially true of the Asian American group, where less variance was accounted for by body dissatisfaction, maternal criticism, and gender than the other two racial and ethnic groups. Additionally, while using individual body dissatisfaction as an independent variable rather than an outcome variable allows for comparison between individual- and other-oriented pressure on body dissatisfaction, this may limit the applicability of our findings within the tripartite influence model framework.

Several additional limitations should be noted here. First, the sample may have been susceptible to sampling bias due to recruitment from only one university. Mean imputation was used to address missing data, which can impact relationships between variables. Another notable limitation is that the current study did not examine the link between paternal criticism and disordered eating pathology. While maternal criticism may be more strongly linked with disordered eating pathology among both male and female offspring (Rodgers et al., 2009), future research should incorporate both maternal criticism and paternal criticism to elucidate their individual and joint associations with disordered eating. Additionally, this study did not include measures of self-construal, collectivist-individualist orientation, or acculturation. This information could provide a more nuanced examination of how maternal criticism and body dissatisfaction differentially are associated with disordered eating across racial and ethnic groups. Similarly, this study is limited in that it only addressed the association between maternal criticism and disordered eating pathology among White, Asian American, and Latinx individuals. As previously discussed, substantial diversity exists among Asian American and Latinx groups and the current study did not assess within-group variation among these individuals. Participants in this study were asked to endorse one group that best described their racial or ethnic identity, however, it is possible that some individuals would have preferred to choose multiple groups. Other racial and ethnic groups, including Blacks, were not included in the sample. Further, individuals who did not identify as male or female (e.g., transgender) were not included in the sample.
female were excluded from the sample. Given these limitations, additional examination of familial and individual variables associated with disordered eating pathology across a wide range of races, ethnicities, cultures, and genders is warranted.

Several strengths of the current study include the diverse and large sample consisting of Latinx, Asian American, and White individuals, especially given that less research with racial and ethnic minority samples exists in the eating disorders field. The examination of maternal criticism of appearance, weight, shape, and size with body dissatisfaction and disordered eating contributes to a small existing literature. Another strength of this study is the inclusion of men; relative to women, there is less research with men and, especially, racial and ethnic minority men. Finally, the conceptualization of racial and ethnic differences in disordered eating and maternal criticism due to differences in self construal and the values of an individualist/collectivist society will hopefully motivate others to further explore how self-construal impacts the development and expression of disordered eating pathology.

In summary, as eating disorders are an important public health issue affecting individuals from all races and ethnicities, cultures, and genders, additional research is greatly needed to evaluate and examine variables associated with disordered eating pathology across groups. Findings from this research contribute to the extant literature addressing the ways in which disordered eating pathology may differentially develop in individuals from diverse racial and ethnic groups. These findings, which speak to sociocultural factors associated with disordered eating pathology, may be clinically informative as well as valuable in intervention science to prevent disordered eating pathology in individuals across diverse cultures, races, and ethnicities, and genders. This study provides information about disordered eating pathology in a college sample. As higher education environments are becoming increasingly diverse, it is important to examine and explore factors influencing health outcomes across a wide range of racial and ethnic groups to inform efficacious interventions. Further, much more research is needed to elucidate the relationships and associations between individual and familial variables linked with disordered eating pathology to work toward greater and more nuanced understanding, treatment, and prevention of disordered eating for all individuals.

References


Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family and size with body dissatisfaction and disordered eating contributing to a small existing literature. Another strength of this study is the inclusion of men; relative to women, there is less research with men and, especially, racial and ethnic minority men. Finally, the conceptualization of racial and ethnic differences in disordered eating and maternal criticism due to differences in self construal and the values of an individualist/collectivist society will hopefully motivate others to further explore how self-construal impacts the development and expression of disordered eating pathology.

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