

# Body Dissatisfaction, Ethnic Identity, and Disordered Eating Among African American Women

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Initial research suggested that only European American women developed eating disorders (Garner, 1993), yet recent studies have shown that African American women do experience them (e.g., Lester & Petrie, 1998b; Mulholland & Mintz, 2001) and also may be negatively affected by similar sociocultural variables. In this study, we examined a sociocultural model of eating disorders for African American women but included the influences of ethnic identity (e.g., Hall, 1995; Helms, 1990). Participants ( $N = 322$ ) were drawn from 5 different universities. They completed measures representing ethnic identity, societal pressures regarding thinness, internalization of societal beauty ideals, body image concerns, and disordered eating. Structural equation modeling revealed that ethnic identity was inversely, and societal pressures regarding thinness directly, related to internalization of societal beauty ideals. Societal pressures regarding thinness was also related to greater body image concerns. Both internalization of societal beauty ideals and body image concerns were positively associated with disordered eating ( $R^2 = .79$ ). Overall, the final model fit the data well, supporting its generalizability and the importance of ethnic identity in determining risk.

*Keywords:* eating disorders, ethnic identity, African American women, body dissatisfaction

To better understand the development and maintenance of eating disorders, researchers have acknowledged the need to identify psychosocial risk factors (Kashubeck-West & Mintz, 2001; Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Striegel-Moore & Cachelin, 1999). Central to these etiological models (e.g., Stice, 2001) are sociocultural variables, in particular social pressures regarding thinness and attractiveness, internalization of societal beauty ideals, and body dissatisfaction. Theoretically, these sociocultural models suggest that girls (and women) are exposed to societal messages about (a) what physical characteristics are associated with being beautiful, (b) the importance of being thin (i.e., low body fat, some muscularity), and (c) how being attractive is considered an essential characteristic for being successful in relationships, careers, and life in general (Striegel-Moore & Bulik, 2007). These messages are thought to be communicated via friends and family members, as well as through traditional media outlets such as magazines, TV, and movies (Stice, 2002). Exposure to these messages starts early in a girl's life and continues into adulthood (Striegel-Moore & Bulik, 2007).

Over time, exposure to these ubiquitous messages is hypothesized to lead girls and women to internalize (i.e., integrate into

their own belief system) societal ideals about beauty, attractiveness, and success (Striegel-Moore & Bulik, 2007). Because few girls' and women's bodies actually approximate the ideal (Brownell, 1991), a discrepancy exists between what they actually look like and what they think their bodies should ideally look like. This real-ideal discrepancy, in turn, is believed to lead to body image concerns, a conclusion supported by the high levels of body dissatisfaction reported among women (e.g., Mazzeo, 1999; Petrie, Tripp, & Harvey, 2002). These sociocultural models (e.g., Stice, 2001) hypothesize a directional relationship between internalization of societal beauty ideals and body image concerns. However, a recent longitudinal study of female undergraduates indicates that these variables may be reciprocally related (Bradford & Petrie, 2008), such that internalization of societal beauty ideals and body image concerns lead to increases in each other over time (i.e., 6 months). Bradford and Petrie (2008) suggested that this reciprocity "may indicate a cycle that maintains women's vulnerability to social influences and continued body dissatisfaction over time" (p. 256). Thus, internalization of societal beauty ideals appears to cause higher levels of body dissatisfaction, and being dissatisfied with their bodies leads women to further internalize societal beauty ideals. This finding may explain why body image concerns remain so stable over time and why it is considered the primary precursor in the development of disordered eating (e.g., Stice, 2002; Tylka & Subich, 2004).

Although these sociocultural variables have been linked to each other, and ultimately to disordered eating, in correlational, longitudinal, and even experimental research (Stice, 2002), the overwhelming majority of these studies have been conducted with samples composed of predominantly European American women. This approach is consistent with early research that focused on eating disorders among European American women (Garner,

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1993; Phelps & Bajorek, 1991) who were from high socioeconomic levels (Andersen & Hay, 1985; Brumberg, 1988) and who had to deal with pressure to conform to societal beauty ideals and to adhere to family expectations of high achievement (Stern et al., 1989). Striegel-Moore and Cachelin (2001) argued that a major gap in the eating disorder literature was the dearth of data concerning ethnic minorities. In fact, women from different ethnic groups likely experience many of these same sociocultural risk factors (e.g., internalization of societal beauty ideals, body image concerns) that have been shown to exist among European American women (Cavanaugh & Lemberg, 1999; Crago, Shisslak, & Estes, 1996; le Grange, Stone, & Brownell, 1998; Lester & Petrie, 1998a; Lester & Petrie 1998b; Mulholland & Mintz, 2001; Osvoild & Sadowsky, 1993; Weiss, 1995), but without research directly examining the hypothesized relationships within each ethnic group, no definitive conclusions can be drawn.

In one of the few studies to examine a multidimensional, socioculturally based model of disordered eating among ethnic minorities, Phan and Tylka (2006) found that the experience of social pressures to be thin was related to lower self-esteem, greater internalization of the thin ideal, and increased body preoccupation. Greater self-esteem was related, in turn, to less internalization and lower body preoccupation. Further, internalization of an unattainable body ideal was related to increased levels of body preoccupation; both of these variables, in turn, were related to higher levels of disordered eating symptomatology. Although they did not test an integrated multidimensional model as did Phan and Tylka (2006), Lester and Petrie (1998b) examined many of the same sociocultural variables to determine their relationship to bulimic symptomatology among female African American undergraduates. Similarly, they found that increased internalization of societal beauty ideals was related to more body dissatisfaction and that body dissatisfaction was the strongest predictor of bulimic symptomatology (Lester & Petrie, 1998b). Although the findings of Phan and Tylka (2006) and Lester and Petrie (1998b) suggest that the pathways proposed in general sociocultural models of disordered eating (e.g., Stice, 2001) may generalize to ethnic minority women, eating disorder researchers (e.g., Root, 2001; Striegel-Moore & Smolak, 1996) have long argued that, to fully understand and be able to predict disordered eating within these subgroups of women, the level of ethnic identity must also be considered in any research conducted.

Therefore, from a general sociocultural perspective, the strength of a woman's identification with the majority culture (and its ideals, beliefs, and values about beauty, the body, and attractiveness) would be expected to increase her risk for body image concerns and disordered eating. But, for ethnic minority women, the extent to which they are strongly identified with, and accept and affirm, their ethnic heritage may actually decrease their risk through a reduction in internalization of general societal beauty ideals. A strong ethnic group identity—particularly when that ethnic group accepts a body size and shape that is larger and more diverse than is idealized in the majority culture—may serve as a buffer and assist ethnic minority women in negotiating the majority cultural milieu and rejecting societal messages that are inherently negative about the self and the body and that are limiting in terms of what is considered beautiful.

For example, Petersons, Rojhani, Steinhaus, and Larkin (2000) found that ethnic identity may be related in different ways to

disordered eating attitudes and behaviors. Among European American college-age women, they found that high levels of ethnic identity were predictive of high drive for thinness and high levels of body dissatisfaction. Conversely, among African American college-age women, high levels of ethnic identity were unrelated to drive for thinness or body dissatisfaction. In their study of female Mexican Americans who were associated with a university, Bettendorf and Fischer (2009) did not report any direct relationships between ethnic identity and control concerns or body dissatisfaction, but they did find that ethnic identity moderated the relationship between acculturation and restricted eating such that when levels of ethnic identity were low, high levels of acculturation predicted restricted eating. Further, Phan and Tylka (2006) found that ethnic identity did predict higher levels of self-esteem but was unrelated to internalization of the thin ideal, body preoccupation, or disordered eating. The findings of Petersons et al. (2000), Bettendorf and Fischer (2009), Phan and Tylka (2006), and others (e.g., Tsai, Curbow, & Heinberg, 2003) suggest that ethnic identity likely plays an important role in the development and maintenance of disordered eating among ethnic minority women, although its effects are likely to be indirect, influencing other psychosocial variables (e.g., self-esteem, internalization of societal beauty ideals), rather than direct on disordered eating symptomatology. Thus, future studies with ethnic minority women will need to include a measure of ethnic identity and examine its potential indirect effects on the development of disordered eating.

### The Current Study

Within-group methodologies are needed to test the sociocultural variables for each ethnic group, yet we focused on African American women in this study for two primary reasons. First, there is a relatively high prevalence rate of disordered eating within this subgroup of women. For example, Mulholland and Mintz (2001) found that in a group of female African American and biracial African American college students, 2% could be classified as having an eating disorder not otherwise specified and 23% as being symptomatic. In a sample drawn from readers of *Essence* magazine, Pumariega, Gustavson, Gustavson, Motes, and Ayers (1994) found that over 50% of the African American women scored as "at-risk" on the basis of their scores on the 26-item Eating Attitudes Test (EAT-26; Garner, Olmstead, & Polivy, 1983). Second, growing up in the United States, African American women are exposed to ubiquitous messages regarding body shape, beauty, and attractiveness. As such, it makes sense that sociocultural models of disordered eating would apply as well to this group of ethnic minority women. As we noted previously, research with African American women has supported some of the purported relationships among the sociocultural variables, such as the connection between internalization of societal beauty ideals and body image concerns (e.g., Lester & Petrie, 1998b). Additional studies on African American women are needed, though, to test the applicability of an integrated sociocultural model and to determine the extent to which it generalizes from European American (e.g., Stice, 2001) and Asian American (Phan & Tylka, 2006) women. Such studies, though, would need to not only address the originally proposed variables in the sociocultural model but also include a measure of ethnic identity (Root, 2001; White & Grilo, 2005). Theoretically, and as discussed previously, ethnic identity's effects

would be indirect and likely protective, such that higher levels would be associated with less internalization of U.S. societal messages about the body, beauty, and attractiveness among African American women.

Thus, in the current study, we examined specific relationships within the general sociocultural model of eating disorders that have been validated with samples composed primarily of European American women and a mixed ethnic sample of Asian American women (e.g., Phan & Tylka, 2006). Due to the potential influence of ethnic identity on internalization of societal beauty ideals, we included that as a construct in the model (see Figure 1). Specifically, we hypothesized that (a) higher reported levels of societal pressures to be thin would be related to more internalization of societal beauty ideals, (b) higher levels of ethnic identity would be related to less internalization of societal beauty ideals, (c) internalization of societal beauty ideals would be directly and positively related to body image concerns, and (d) body image concerns would be associated with higher levels of disordered eating. We proposed an alternative model based on theory and empirical research (e.g., Phan & Tylka, 2006) that was comprised of these same hypothesized relationships but added one pathway. In the alternative model, we proposed a pathway from societal pressures directly to body image concerns, suggesting that the experience of higher levels of pressures would be related to more concerns. Finally, because this study represented one of the first to directly test a sociocultural model within a sample of African American women, we used a correlational design to establish the existence of the relationships prior to testing them either longitudinally or experimentally (Stice, 2002).

## Method

### Participants

Participants were 322 African American female undergraduates drawn from five colleges and universities in the southern region of the United States—two public universities that were predominantly European American, two historically Black universities, and one historically Black college. Average age was 20.2 years ( $SD = 1.88$ ). In terms of year in school, 94 (29.2%) were in their first year, 79 (24.5%) were sophomores, 86 (26.7%) were juniors, and 61 (18.9%) were seniors; 2 (0.6%) gave no response. The sample was predominantly single (97.2%,  $n = 313$ ). The range of annual income for family of origin was as follows: below \$10,000 (9.6%;  $n = 31$ ), \$10,000–\$30,000 (17.7%;  $n = 57$ ), \$30,000–\$50,000 (28.6%;  $n = 92$ ), \$50,000–\$80,000 (22.4%;  $n = 72$ ),

\$80,000–\$100,000 (9.3%;  $n = 30$ ), and above \$100,000 (7.1%;  $n = 23$ ); no response (5.3%;  $n = 17$ ).

The average real and ideal body mass index (BMI) were 26.1  $kg/m^2$  ( $SD = 5.94$ ) and 23.32  $kg/m^2$  ( $SD = 3.39$ ), respectively. According to weight guidelines from the Centers for Disease Control and Prevention (2008), and on the basis of their real BMIs, 3.1% could be classified as underweight (BMI < 18.5  $kg/m^2$ ), 49.4% as normal weight (BMI = 18.5–24.9  $kg/m^2$ ), 23.9% as overweight (BMI = 25.0 to 29.9  $kg/m^2$ ), and 21.7% as obese (BMI > 30.0  $kg/m^2$ ); 6 (1.9%) women did not provide height and weight data. For those women who currently were underweight, 44.4% reported an ideal BMI that would place them in the underweight category; the remainder wanted to be normal weight (ideal BMI  $M = 18.49$   $kg/m^2$ ,  $SD = 1.52$ ). For those who were in the normal weight category, 4.5% wanted to lose enough weight to be underweight, 94.9% wanted to remain in the normal weight category, and 0.6% reported an ideal BMI that would make them overweight (ideal BMI  $M = 21.39$   $kg/m^2$ ,  $SD = 1.66$ ). For those who were overweight, 70.1% wanted to lose enough weight to fall into the normal weight category; the remainder reported an ideal BMI that would keep them in the overweight group (ideal BMI  $M = 24.02$   $kg/m^2$ ,  $SD = 1.75$ ). Finally, for those who were obese, 20% wanted to lose enough weight to drop them into the normal weight category, 60% reported an ideal BMI that would place them in the overweight group, and 20% had ideal BMIs that would keep them in the obese category (ideal BMI  $M = 27.44$   $kg/m^2$ ,  $SD = 3.61$ ).

### Instruments

**Sociocultural pressures.** The eight-item Perceived Sociocultural Pressure Scale (PSPS; Stice, Ziemba, Margolis, & Flick, 1996) measures the pressures that individuals experience from family members, friends, romantic partners, and the media to be thin and attractive. On items such as “I’ve experienced pressure from my friends to achieve weight loss,” individuals respond using a 5-point Likert scale that ranges from 1 (*never*) to 5 (*always*); total scores are the average of the items. Higher scores indicate more perceived pressure to be thin and attractive. Two-week test–retest and internal consistency reliabilities have been reported as .93 and .87, respectively, in a sample of female high school and college students (Stice et al., 1996); Cronbach’s alpha for the current study was .85. The PSPS has been related to retrospective reports of pressure from parents to be thin ( $r = .51$ ), supporting its validity (Stice et al., 1996).

The three-item Media factor from the Perceived Sociocultural Influences on Body Image and Body Change Questionnaire

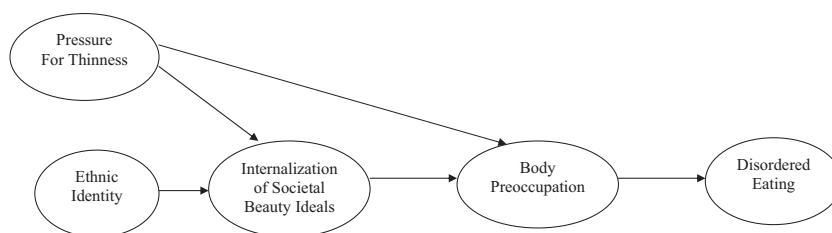


Figure 1. Modified structural model used by Phan and Tylka (2006).

(PSIQ-M; McCabe & Ricciardelli, 2001) measures the extent to which individuals receive messages from the media about losing weight and being slimmer. On items such as "I believe that the media suggests I should eat less to lose weight," individuals respond on a scale that ranges from 1 (*strongly agree*) to 5 (*strongly disagree*). The total score is the average of the three items; higher scores indicate the experience of more pressure from the media. In a sample of adolescent girls from different ethnic backgrounds, McCabe and Ricciardelli (2001) reported a Cronbach's alpha of .90; Cronbach's alpha for the current study was .89. The PSIQ-M was shown to have good discriminant validity when subjected to a principal components factor analysis (McCabe & Ricciardelli, 2001).

The seven-item Sociocultural Attitudes Toward Appearance Questionnaire-3-Pressures scale (SATAQ-3-P; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004) measures the influence the media has on the amount of pressure an individual feels to conform to the thin ideal. On items such as "TV and/or magazines push me to lose weight," respondents indicate their level of agreement on a 5-point Likert-type scale that ranges from 1 (*completely disagree*) to 5 (*completely agree*). Total scores are the average of the items; higher scores indicate higher experienced pressure. In a sample of female undergraduates, Thompson et al. (2004) reported Cronbach's alpha of .92; Cronbach's alpha for the current study was .93. In support of the scale's validity, Thompson et al. (2004) found that the SATAQ-3-P was correlated with the Drive for Thinness Scale ( $r = .58$ ) and the Body Dissatisfaction Scale ( $r = .48$ ) of the Eating Disorder Inventory (Garner, 1991) and the Ideal Body Internalization Scale-Revised (Stice et al., 1996;  $r = .38$ ).

**Ethnic identity.** The 12-item Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992; R. E. Roberts et al., 1999) assesses identity along two dimensions—Exploration (six items; learning and seeking information about and becoming involved in an ethnic group) and Commitment (seven items; commitment to and sense of belonging to an ethnic group)—and one item is shared by both dimensions. On items such as "I understand my ethnic background and how it affects me," individuals answer using a 4-point Likert-type scale that ranges from 1 (*strongly disagree*) to 4 (*strongly agree*). Factor total scores are the mean of the respective items; higher scores indicate a stronger ethnic identity. In a large sample of ethnically diverse male and female adolescents, R. E. Roberts et al. (1999) reported internal consistency reliabilities (Cronbach's alphas) that ranged from .81 to .86 (Commitment) and .55 to .76 (Exploration); Cronbach's alpha for the current study were .86 (Commitment) and .77 (Exploration). The MEIM was shown to have acceptable concurrent validity with respect to multiple measures of psychological well-being (R. E. Roberts et al., 1999).

**Internalization of societal beauty ideals.** The 19-item Beliefs About Attractiveness Scale-Revised (BAAR; Petrie, Rogers, Johnson, & Diehl, 1996) measures agreement with U.S. societal values regarding beauty and attractiveness along two dimensions with these subscales: the Importance of Being Physically Fit (nine items) and the Importance of Being Attractive and Thin (10 items). On items such as "When making decisions about romantic relationships, individuals prefer thin women to overweight women," individuals respond using a 7-point Likert scale that ranges from 1 (*strongly disagree*) to 7 (*strongly agree*). Total scores are the

average for each factor and can range from 1 (*low internalization of societal beauty ideals*) to 7 (*high internalization of societal beauty ideals*). In a sample of predominantly European American female undergraduates, Bradford and Petrie (2008) reported internal consistency reliabilities of .79 (physically fit) and .84–.85 (attractive and thin); Cronbach's alphas for the current study were .83 (physically fit) and .86 (attractive and thin). In a sample of female African American undergraduates, Lester and Petrie (1998b) found that the physically fit and the attractive and thin factors, respectively, were related significantly to bulimic symptoms ( $r_s = .25$  and  $.28$ ), body satisfaction ( $r_s = -.23$  and  $-.31$ ), depression ( $r_s = .24$  and  $.29$ ), and self-esteem ( $r_s = -.28$  and  $-.30$ ).

The nine-item Sociocultural Attitudes Toward Appearance Questionnaire-3-Internalization General scale (SATAQ-3-IG; Thompson et al., 2004) measures the influence the media has on an individual's internalization of societal beauty ideals. On items such as "When evaluating my body, I use the bodies of TV and movie stars as standards," individuals answer each question using a 5-point Likert-type scale that ranges from 1 (*completely disagree*) to 5 (*completely agree*). Total scores are the mean of the nine items; higher scores indicate more internalization of societal beauty ideals. Thompson et al. (2004) reported a Cronbach's alpha of .96 in a sample of female undergraduates; Cronbach's alpha for the current study was .91. Thompson et al. (2004) reported that, in two studies, the SATAQ-3-IG was related to the Drive for Thinness ( $r = .55$  and  $.57$ ) and Body Dissatisfaction ( $r = .32$  and  $.40$ ) subscales of the Eating Disorder Inventory (Garner, 1991), providing support for its validity.

**Body image concerns.** The 10-item Body Shape Questionnaire-Revised (BSQ-10-R; Mazzeo, 1999) measures preoccupation with body size and shape. On items such as "Does your desire to diet come from very high levels of concern about your figure," individuals respond using a 6-point Likert scale that ranges from 1 (*never*) to 6 (*always*). Total scores are the average of the items; higher scores indicate more preoccupation. Mazzeo (1999) reported a Cronbach's alpha of .96 in a sample of female college students; Cronbach's alpha for the current study was .96. Mazzeo found that the BSQ-10-R correlated significantly ( $r = -.78$ ) with the Weight Concern subscale of the Body Esteem Scale (Franzoi & Shields, 1984), providing evidence for the scale's convergent validity.

The seven-item Satisfaction With Body factor from the Body Parts Satisfaction Scale-Revised (BPSS-R-Body; Petrie et al., 2002) measures satisfaction with parts of one's body (e.g., thighs, stomach). Each body part is rated using a 6-point Likert-type scale that ranges from 1 (*extremely dissatisfied*) to 6 (*extremely satisfied*). The total score is the average of those items and can range from 1 (*less satisfaction*) to 6 (*greater satisfaction*). In addition, a one-item measure of "overall" satisfaction was included and answered on the same scale. In a sample of female college students, Cronbach's alpha for the Satisfaction With Body factor was .90 (Petrie et al., 2002); Cronbach's alpha for the current study was .86. Lester and Petrie (1998b) reported that, within a sample of female African American college students, Cronbach's alpha was .93 and the correlation between the overall score obtained on the BPSS-R and a single-item measure of body satisfaction was .70. Petrie et al. (2002) reported that the Satisfaction With Body factor was correlated with the BMI ( $r = -.44$ ), the BPSS-R's one-item

overall measure of body satisfaction ( $r = .82$ ), the Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987;  $r = -.65$ ), the BAAR–Desire for Thinness (Petrie et al., 1996;  $r = -.20$ ), the Visual Analogue Mood Scale (VAMS) Depressed (Stice & Shaw, 1994;  $r = -.37$ ), the VAMS–Guilty ( $r = -.18$ ), the VAMS–Ashamed ( $r = -.28$ ), the VAMS–Happy ( $r = .29$ ), the VAMS–Confident ( $r = .35$ ), and the Bulimia Test–Revised (BULIT-R; Thelen, Mintz, & Vander Wal, 1996;  $r = -.48$ ), providing support for the factor’s validity.

**Disordered eating.** The 36-item BULIT-R (Thelen et al., 1996) measures behaviors and attitudes associated with a diagnosis of bulimia nervosa according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; American Psychiatric Association, 1994). Only 28 of the items contribute to the total score. On items such as “I am comfortable with my eating habits,” individuals respond using a 5-point Likert-type scale that ranges from 1 (*no bulimic symptoms*) to 5 (*high bulimic symptoms*). Total scores can range from 28 to 140; higher scores indicate more bulimic symptoms. In a sample of female college students, Pelletier, Dion, and Levesque (2004) reported a Cronbach’s alpha of .95; Cronbach’s alpha for the current study was .89. In samples of female college students, 3-week test–retest reliability was .85 (Mazzeo, 1999). Thelen et al. (1996) reported a validity coefficient of .73 when total BULIT-R scores were correlated with group classification (individuals with bulimia or controls). Among female African American college students, Cronbach’s alphas of .90 (Lester & Petrie, 1998b) and .96 (Fernandez, Malcarne, Wilfley, & McQuaid, 2006) have been reported.

The EAT-26 (Garner et al., 1983) measures disordered eating attitudes and behaviors concerning dieting, bulimia and food preoccupation, and oral control. On items such as “I am extremely worried about being obese,” individuals select one of six possible responses. For each item, three of the six possible responses that do not indicate eating pathology are given a score of 0. Responses that indicate eating disturbances are given scores ranging from 1 to 3. Total scores range from 0 to 78; higher scores indicate more eating pathology. Mazzeo (1999) reported a Cronbach’s alpha of .91 and a 3-week test–retest reliability of .86 in a sample of female undergraduates; Cronbach’s alpha for the current study was .72. Mintz and O’Halloran (2000) reported a correlation of .79 between EAT-26 scores and clinical diagnosis, supporting the scale’s validity.

**Social desirability.** The 12-item Form B of the Marlowe-Crowne Social Desirability Scale (MC-SDS; Reynolds, 1982) measures the tendency to portray oneself in a positive light. On items such as “I need to have things happen as I want them to, otherwise I sometimes feel bitter,” individuals select either *True* or *False*; total scores can range from 0 (*low social desirability*) to 12 (*high social desirability*). Reynolds (1982) reported an internal consistency of .75; Kuder–Richardson reliability index for the current study was .68. Reynolds reported that scale scores were significantly correlated with the standard version of the MC-SDS (Crowne & Marlowe, 1960;  $r = .92$ ) and with the Edwards Social Desirability Scale (Edwards, 1957;  $r = .38$ ).

**Demographic information.** Participants provided information regarding their age, current year in school, socioeconomic status, marital status, current height and weight, and ideal weight.

## Procedure

Participants were recruited from undergraduate classes and African American social groups at the different schools via either online departmental research websites or in-person announcements in classes and at social groups. The study was approved by the university’s Institutional Review Board for Human Subjects Research. In all recruitment situations, the women were asked to complete a survey concerning the physical and psychological health of African American women. Individually or in small groups, the women signed the study’s consent form and then completed a questionnaire packet that contained the demographic questionnaire, MEIM–Ethnic Identity, the PSPS, the PSIQ, the BAAR, the SATAQ-3, the BSQ-10-R, the BPSS-R, the BULIT-R, the EAT-26, and the MC-SDS. The measures on the questionnaire were counterbalanced to control for ordering effect. When allowed, the students received course extra credit for their participation, as well as a debriefing page with a list of psychological referrals. Additionally, all participants were entered into a raffle for a \$200 cash prize.

## Data Analysis

To test the proposed measurement and structural models, we used structural equation modeling (SEM) with the EQS Structural Equations Program (Bentler, 1995). In terms of participants who were excluded from the subsequent analyses, 18 were dropped because they either were not in the age range limitation of the study (i.e., 18–25 years) or were not African American (e.g., Asian American) and 18 were dropped because they had left at least one questionnaire (e.g., EAT, BULIT-R) completely blank. Of those participants who were included in the study ( $N = 322$ ), some had missing data. We examined all missing data points and determined that the pattern of missing data was random, spread across all the questionnaires. Of the 149 participants who had missing data, 67% missed only a single item in their entire questionnaire packet and 32% missed between two and four items. In total, only 0.48% of the possible data points were missing across all the participants; these were replaced with the participant’s mean score from the measure in question.

Once missing data points were replaced, means, standard deviations, skewness, and kurtosis for each measured variable were calculated. Because some of the skewness and kurtosis statistics were significant, we examined the distributions visually (Fidell & Tabachnick, 2003) and determined that the significance was likely due to the large sample size. When running the SEM analyses, though, we examined the statistics for multivariate normality within the EQS program and found them to be within the acceptable range.

EQS (Bentler, 1995) provides incremental, absolute, and predictive fit indices that are recommended for evaluating the adequacy of a model (Weston & Gore, 2006; Worthington & Whittaker, 2006). The specific fit indices used were chi-square goodness of fit, the comparative fit index, the nonnormed fit index, the standardized root-mean-square residual, the root-mean-square error of approximation with 90% confidence interval, and Akaike’s information criterion (AIC). A chi-square test was conducted to determine which of the nested models, Model A or Model B, provided the best fit to the data (Martens, 2005). The

maximum likelihood procedure was used to estimate the parameters of the evaluated models.

We used confirmatory factor analysis to define the measurement model (Anderson & Gerbing, 1988). We then used SEM to test the relationships between the latent variables in the proposed structural Model A, expecting ethnic identity to be negatively related to internalization of societal beauty ideals; societal pressures regarding thinness to be positively related to internalization of societal beauty ideals; internalization of societal beauty ideals to be positively related to body image concerns; and body image concerns to be positively related to disordered eating. The pathways tested in Model B included all of the pathways in Model A with one addition—a positive pathway between perceived pressure and body image concerns. Because Model A was nested within Model B, we could test their relative fit.

**Results**

Table 1 contains the means, standard deviations, and correlations among all the measured variables proposed for this study as well as the measure of social desirability. A few correlations with social desirability were significant, but they generally were small, sharing less than 7% of the common variance. Although not a focus of the study, the scores on the measured variables for the students who attended the historically Black schools were compared with those for students who were enrolled in the predominantly European American institutions. Multivariate analyses of variance revealed that the two groups of students did not differ significantly on any of the sets of measures that made up each latent variable in the model ( $p > .10$ ).

**Measurement Model**

We started with the latent variable ethnic identity, defining it by the Commitment and Exploration subscales from the MEIM. Once the error variance was set for the Commitment subscale (Bollen, 1989), the two MEIM factors loaded positively on the ethnic

identity factor, indicating that higher scores represented stronger identification, through commitment and exploration, to African American culture.

For the perceived societal pressures regarding thinness construct, we loaded the PSPS, SATAQ-3-P, and PSIQ-M measured variables. All three loaded positively on the Perceived Societal Pressures Regarding Thinness factor, indicating that it represented more experienced pressure, from outside influences, to adhere to the thin ideal.

For internalization of societal beauty ideals, the SATAQ-3-IG as well as the Importance of Being Physically Fit and the Importance of Being Attractive and Thin factors of the BAAR were examined. The SATAQ-3-IG had high residuals with several other variables as well as a lower loading and was thus dropped from the model. The two BAAR subscales loaded positively on the internalization of societal beauty ideals factor, indicating that it represented increased internalization of societal beauty ideals regarding appearance and weight.

For body image concerns, we loaded the BSQ-10-R, the BPSS-R-Body, and the one-item overall body satisfaction item. The one-item measure was dropped due to high residuals, and the error variance for the BSQ-10-R was set using Bollen's (1989) method. The BSQ-10-R loaded positively (i.e., body shape concerns) and the BPSS-R-Body negatively (i.e., body satisfaction), so higher scores on the latent variable represented more body image concerns.

For disordered eating, the BULIT-R and the EAT-26 loaded positively, as expected. The factor thus represented disordered eating or increased levels of clinical eating pathology (see Table 2 for detailed information on the loadings and Table 3 for the fit of the measurement model).

**Structural Models**

**Model A.** Overall, the fit of the model was moderate (see Table 3). All hypothesized pathways, though, were significant and

Table 1  
Correlation Matrix of Measured Variables and Demographic Variables ( $N = 322$ )

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. MEIM-Comm	3.43	0.49	—											
2. MEIM-Exp	2.97	0.61	.57**	—										
3. PSPS	2.05	0.85	-.06	.04	—									
4. PSIQ-M	3.49	1.40	-.05	.04	.55**	—								
5. SATAQ-3-P	2.80	1.26	-.10	.04	.64**	.64**	—							
6. BAAR-PF	4.15	1.25	-.10	-.001	.25**	.17**	.32**	—						
7. BAAR-AT	2.14	1.01	-.21**	-.10	.30**	.17**	.29**	.65**	—					
8. SATAQ-3-IG	2.50	1.01	-.10	.04	.64**	.64**	.63**	.32**	.29**	—				
9. BSQ-10-R	2.56	1.33	-.03	.01	.65**	.49**	.60**	.26**	.28**	.60**	—			
10. BPSS-R-Body	4.14	1.08	.14*	.13*	-.47**	-.38**	-.44**	-.20**	-.24**	-.44**	-.69**	—		
11. BULIT-R	44.86	13.45	-.03	.02	.47**	.27**	.38**	.25**	.37**	.38**	.62**	-.43**	—	
12. EAT-26	6.55	5.92	.13*	.10	.41**	.24**	.33**	.34**	.27**	.33**	.45**	-.27**	.41**	—
13. MC-SDS	6.25	2.74	.12*	.03	-.15**	-.14*	-.19**	-.19**	-.14**	-.19**	-.22**	.24**	-.19**	-.07

Note. MEIM-Comm = Multigroup Ethnic Identity Measure-Commitment; MEIM-Exp = MEIM-Exploration; PSPS = Perceived Sociocultural Pressure Scale; PSIQ-M = Perceived Sociocultural Influences on Body Image and Body Change Questionnaire-Media; SATAQ-3-P = Sociocultural Attitudes Toward Appearance Questionnaire-3-Pressures; SATAQ-3-IG = SATAQ-3-Internalization General; BAAR-PF = Importance of Being Physically Fit subscale of the Beliefs About Attractiveness Scale-Revised; BAAR-AT = Importance of Being Attractive and Thin subscale of the BAAR; BSQ-10-R = Body Shape Questionnaire-Revised; BPSS-R-Body = Satisfaction With Body factor from the Body Parts Satisfaction Scale; BULIT-R = Bulimia Test-Revised; EAT-26 = 26-item Eating Attitudes Test; MC-SDS = Marlowe-Crowne Social Desirability Scale-Form B.

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

Table 2  
Standardized Parameter Estimates for the Measurement Model  
( $N = 322$ )

Latent and observed variables	Factor loading	Error variance
Ethnic identity		
MEIM-Comm	.926	.376
MEIM-Exp	.614	.789
Perceived pressure		
PSPS	.805	.594
PSIQ-M	.708	.706
SATAQ-3-P	.825	.565
Internalization of societal beauty ideals		
BAAR-PF	.722	.692
BAAR-AT	.902	.432
Body image concerns		
BSQ-10-R	.980	.199
BPSS-R-Body	-.706	.709
Disordered eating		
BULIT-R	.717	.697
EAT-26	.569	.822

Note. MEIM-Comm = Multigroup Ethnic Identity Measure-Commitment; MEIM-Exp = MEIM -Exploration; PSPS = Perceived Sociocultural Pressure Scale; PSIQ-M = Perceived Sociocultural Influences on Body Image and Body Change Questionnaire-Media; SATAQ-3-P = Sociocultural Attitudes Toward Appearance Questionnaire-3-Pressure; BAAR-PF = Importance of Being Physically Fit subscale of the Beliefs About Attractiveness Scale-Revised; BAAR-AT = Importance of Being Attractive and Thin subscale of the BAAR; BSQ-10-R = Body Shape Questionnaire-Revised; BPSS-R-Body = Satisfaction With Body factor from the Body Parts Satisfaction Scale; BULIT-R = Bulimia Test-Revised; EAT-26 = 26-item Eating Attitudes Test.

in the expected direction (see Figure 2). Weaker ethnic identity and more societal pressures regarding thinness accounted for 27% of the variance in internalization of societal beauty ideals. Internalization of societal beauty ideals, then, explained 20% of the body image concerns variance. Finally, body image concerns accounted for 71% of the variance in disordered eating.

**Model B.** This model was the same as Model A but included one additional pathway: Societal pressures regarding thinness was hypothesized to be positively related to body image concerns. Thus, Model A was nested within Model B. Overall, the fit of this model was good (see Table 3). In addition, the chi-square difference test between the two models was significant,  $\Delta\chi^2(1, N = 322) = 140.13, p < .001$ , and the AIC decreased 138.12 with the

addition of the pathway in Model B. These data suggest that Model B, although more complex, was a significantly better fitting model than Model A.

For Model B, the pathways between (a) ethnic identity and internalization of societal beauty ideals, (b) societal pressures regarding thinness and internalization of societal beauty ideals, (c) societal pressures regarding thinness and body image concerns, and (d) body image concerns and disordered eating were significant and in the expected directions. The pathway between internalization of societal beauty ideals and body image concerns, however, was nonsignificant (see Figure 2). Weaker ethnic identity and stronger societal pressures regarding thinness accounted for 19% of the variance in internalization of societal beauty ideals. Also, societal pressures regarding thinness and internalization of societal beauty ideals accounted for 59% of the body image concerns variance. Finally, body image concerns explained 71% of the variance in disordered eating.

### Model B Respecification

Because Model B was the better fitting model, it was examined to determine whether any changes were warranted to improve its fit with the data. Initially, the nonsignificant pathway between internalization of societal beauty ideals and body image concerns was removed. Then, on the basis of the Lagrange Multiplier Test (Bentler & Dijkstra, 1985; Lee, 1985), we made one additional change to the model. We added a direct pathway between internalization of societal beauty ideals and disordered eating. This change, which was consistent with past empirical research showing that greater internalization of societal ideals about appearance is directly related to disordered eating behaviors (e.g., Griffiths et al., 2000; Halliwell & Harvey, 2006; Phan & Tylka, 2006), resulted in a decrease in the AIC value by 25.98. The final fit of this respecified model was very good (see Table 3).

In the respecified model, all pathways were significant and in the expected directions (see Figure 3). Weaker ethnic identity and more societal pressures regarding thinness accounted for 18% of the variance in internalization of societal beauty ideals. Societal pressures regarding thinness, on its own, explained 60% of the variance in body image concerns. Body image concerns and internalization of societal beauty ideals, combined, explained 79% of the disordered eating variance.

Table 3  
Model Fit and Comparison ( $N = 322$ )

Model	$df$	$\chi^2$	NNFI	CFI	AIC	SRMR	RMSEA [90% CI]	$\Delta\chi^2$ <sup>a</sup>
Measurement model	36	79.12***	.991	.994	7.12	.048	.068 [.050, .085]	
Model A	42	246.99***	.966	.975	162.99	.148	.133 [.118, .148]	
Model B	41	106.86***	.988	.991	24.87	.063	.079 [.063, .095]	140.13***
Respecified Model B	41	88.08***	.992	.994	6.08	.054	.066 [.049, .083]	—

Note. Dash indicates that because respecified Model B represents a reparameterization of Model B, it was not nested and chi-square comparisons could not be run. NNFI = nonnormed fit index (>.95 indicates good fit); CFI = comparative fit index (>.90 indicates good fit); AIC = Akaike's information criterion; SRMR = standardized root-mean-square residual (<.08 indicates good fit); RMSEA = root-mean-square error of approximation (<.06 indicates good fit); 90% CI = 90% confidence interval.

<sup>a</sup> Value reflects a comparison with Model A.

\*\*\*  $p < .001$ .

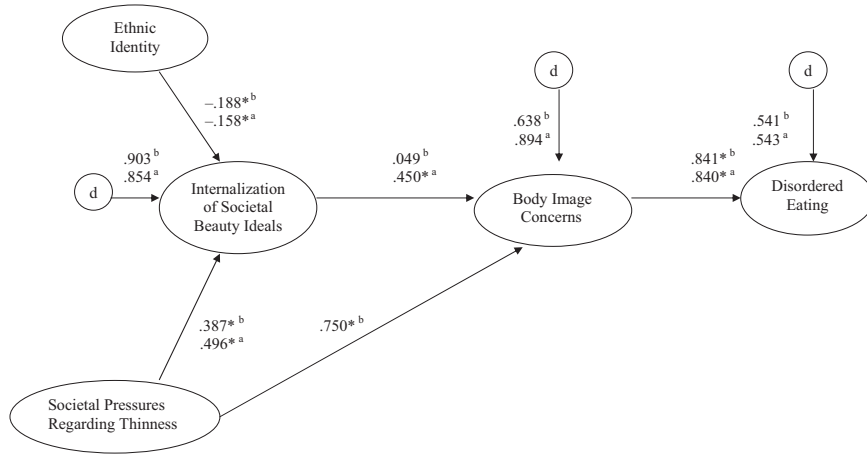


Figure 2. Structural Model A and Model B. Standardized parameter estimates and disturbance terms denoted with superscript *a* are for Model A, and those denoted with superscript *b* are for Model B. *d* = disturbance term. \* *p* < .05.

**Discussion**

In this study, we tested a general sociocultural model of eating disorders (e.g., Phan & Tylka, 2006; Stice, 2001) using a large sample of female African American undergraduates. We examined two models, one nested within the other, that hypothesized relationships between ethnic identity, societal pressures regarding thinness, internalization of societal beauty ideals, body image concerns, and disordered eating. Of the two nested models, Model B had a better fit with the data as determined through the chi-square comparison test and improvements in AIC values. The respecified Model B, which had the best overall fit with the data of all the models we examined, explained 79% of the variance in the eating disorder construct. All the pathways were also significant and in the hypothesized directions. Specifically, the more strongly the African American women identified with their ethnic group, the less they internalized U.S. societal ideals regarding attractiveness and beauty. The more societal messages/pressures they reported experiencing, the more they indicated internalizing these

messages and the more concerns they expressed regarding the size and shape of their bodies. Internalization of societal beauty ideals and body image concerns, in the end, were related directly to higher reported levels of disordered eating.

Although our findings regarding the influence of ethnic identification differ from those of studies conducted with both African American (Lester & Petrie, 1998b) and Asian American (Phan & Tylka, 2006) women, they are consistent with theoretical propositions (e.g., Root, 1990, 2001). For African American women, the protective effects associated with strongly identifying with their cultural group may operate in one of several ways. First, women with strong identification may simply pay less attention to the majority culture media and thus have little exposure to its messages about women and their bodies (Striegel-Moore & Cachelin, 2001). Instead, they may receive messages about women, their bodies, and their self-worth from culturally consistent sources, such as family, churches, friends, and ethnic media outlets, which are more supportive of who they are and what they look like

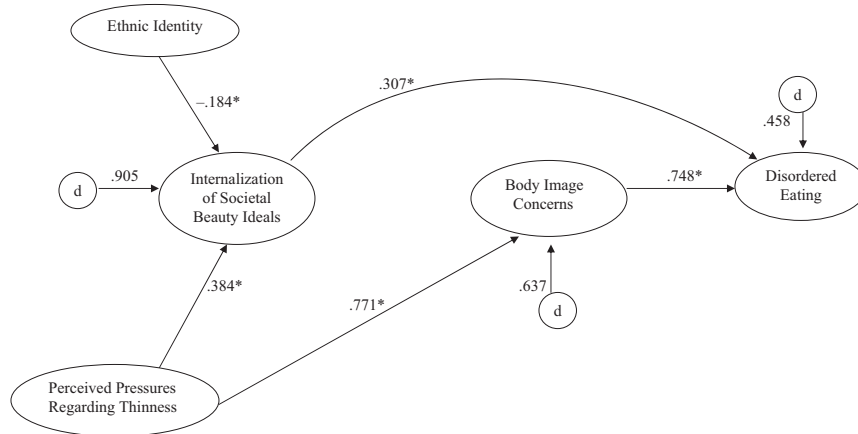


Figure 3. Respecified structural Model B with the standardized parameter estimates and disturbance terms. *d* = disturbance term. \* *p* < .05.



naturally. Additionally, women who identify more with African American culture would be likely to hold values about themselves and their bodies that would serve to lessen the likelihood of adopting the general cultural value that a thin body is considered the beauty ideal. Specifically, these women would make the choice to appreciate and value a larger body size as the ideal and would also choose to believe that their worth is determined more by internal than external factors.

This study is unique in that we found a direct relationship between internalization of societal beauty ideals and disordered eating. Because higher levels of ethnic identity were directly and negatively related to internalization of societal beauty ideals, our results suggest that ethnic identity does influence disordered eating, though indirectly. Bettendorf and Fischer (2009) also found that ethnic identity had an impact on disordered eating. In their study, ethnic identity moderated the relationship between acculturation and restricted eating. Thus, although research has not yet found ethnic identity to be related directly to disordered eating, it does appear to play an integral, though indirect, role in the development and maintenance of eating pathology among ethnic minority women.

The relationship between (a) an increase in the exposure and pressure to conform to U.S. societal values regarding attractiveness (e.g., being thin is highly valued) that were communicated by friends and the media and (b) an increase in the extent to which African American women internalized those values was consistent with findings from previous research (e.g., Phan & Tylka, 2006; Stice, 2002; Tylka & Subich, 2004). For example, in a sample of primarily European American college women, Tylka and Subich (2004) found that perceived pressures accounted for 48% of the variance in internalization of societal beauty ideals, whereas among Asian American women, Phan and Tylka (2006) reported a positive association between the experience of pressures to be thin and internalization of those messages. Further, a meta-analysis of longitudinal and experimental studies determined that societal pressures are a risk factor for eating disorders (Stice, 2002). Thus, even for African American women, the more they are exposed to the unrealistic beauty ideals that are ubiquitous in U.S. society, the more likely they are to internalize those messages. As girls develop, they receive the message that to be valued, successful, and happy, they need to be thin and attractive as defined by media representations of this beauty ideal. This message, through repeated exposure, becomes what the girls believe to be true and creates an image and an ideal that is internalized and used in their own evaluations of themselves and their bodies (Presnell, Bearman, & Stice, 2004).

Increased exposure to messages regarding U.S. society's beauty ideal was also related to increased body image concerns among African American women, accounting for 59% of the variance. In related studies, Groesz, Levine, and Murnen (2002) found that increased exposure to the thin ideal through the media was related to increased levels of body image concerns in female adolescents (not yet in college) and in women of college age and older, whereas Dittmar (2005) observed that pressure from a social group to adhere to the thin ideal led to higher levels of body image concerns among female undergraduates. Further, a meta-analysis of research examining this relationship has shown that exposure to media messages about thinness and societal expectations about beauty is consistently, and inversely, related to women's satisfac-

tion with their bodies (Grabe, Ward, & Hyde, 2008). Even though the society's body ideal is one that is difficult, if not impossible, for most women to attain (Brownell, 1991), they still experience pressure to conform to that ideal (Presnell et al., 2004). When confronted with the ubiquitous societal image of female beauty and attractiveness, African American women, like European American women, appear to evaluate their bodies as lacking in terms of their size and shape. This ideal-real discrepancy in body size and shape may be what contributes to their feeling dissatisfied. Although the thin ideal is not a natural part of African American women's cultural value system, greater exposure to this mainstream societal beauty ideal may increase not only their internalization of it but also the extent to which they feel dissatisfied with their bodies.

In the final model, higher levels of internalization of societal beauty ideals and more body image concerns were related significantly to more eating pathology, relationships that have been validated in previous research (e.g., Phan & Tylka, 2006; Piran & Cormier, 2005; Polivy & Herman, 2004; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Tylka & Subich, 2004). Although internalization of societal beauty ideals may prompt dieting behavior without the involvement of body dissatisfaction (Stice, 2002), in this study, body image concerns accounted for most of the variance (71%) of the eating disorder construct, a finding consistent with past research (Phan & Tylka, 2006; Stice, 2001; Tylka & Subich, 2004). African American women who have internalized the beauty ideal are indicating a strong desire for social approval, and that, in combination with high levels of body dissatisfaction, may serve as their impetus to change their bodies. These women may engage in behaviors such as restricting their food intake or increasing their level of exercise in an effort to reshape their bodies to more closely approximate the societal ideal. However, because this ideal is unattainable for most women (Brownell, 1991), and because they are unlikely to be able to sustain the rigid dietary restriction and workout regimen necessary to actually cause significant physical changes in their bodies, they are likely to experience disinhibition (Heatherton & Baumeister, 1991) and to binge-eat in response to their state of extreme caloric deficiency. When followed by some form of purging, which is done to cope with the feelings of guilt and shame that often accompany binge eating, these women may fall into the cycle that is the immediate precursor to disordered eating, in particular bulimia nervosa.

### Counseling Implications

The results of this study have several implications for counseling and treatment of disordered eating among African American women. First, it is important for counseling psychologists to be aware that, contrary to early research findings (Garner, 1993; Phelps & Bajorek, 1991), African American college women do experience disordered eating symptoms, and these symptoms are related to the sociocultural variables that are established risk factors among European Americans. Thus, counseling psychologists need to be attuned to the messages that African American undergraduates communicate about their bodies, their beliefs about attractiveness, and the cultural messages they have internalized about beauty and worth and not assume that these women are protected from these issues simply because of their ethnicity.

Second, because of the connection between sociocultural pressures and body image concerns (and then, ultimately, disordered eating), interventions can be developed to target and minimize the impact of these variables. Psychoeducational groups could offer women the opportunity to discuss the presence of the thin ideal in U.S. society, the myths attached to it (e.g., to be beautiful, you must be thin), and the cost associated with pursuing it. Through such programs, women could be taught how to think critically about the societal, familial, and peer messages they receive about body, beauty, and worth and then given the opportunity to do so. Such experiences may inoculate them against the need to compare themselves and their bodies with others and thus reduce their level of body image concerns and increase their self-esteem (and make the locus more internal than external). This type of approach has been found to be effective in decreasing both social comparison and the negative impact of viewing media presenting the thin ideal (Posavac, Posavac, & Weigel, 2001) and in helping women from different ethnic groups decrease internalization of societal beauty ideals, body dissatisfaction, negative affect, and bulimic symptoms (Stice, Presnell, Gau, & Shaw, 2007). Empirically validating counseling interventions is a necessary direction for future research.

Third, given that maintaining the values, beliefs, characteristics, and behaviors associated with their culture of origin appears to be related to less internalization of societal beauty ideals and thus fewer incidences of disordered eating behaviors, counseling psychologists may want to talk with African American women about how they can nurture and maintain these beliefs as they interact with (and possibly adopt some) mainstream cultural values. For example, helping African American women appreciate and accept what their culture values about women's body shape and size may provide them with a more realistic and accepting standard for female beauty. Such discussions and education may occur in small group settings, where African American women can explore, in a supportive environment, their cultural values and beliefs and consider the real, health-related costs associated with abandoning them and adopting those of the mainstream culture.

### Limitations and Implications for Future Research

There were several limitations in this study that warrant discussion. First, all data were collected via self-report, so participants may have underreported symptoms or simply chosen to present themselves in a more positive light. Although this was possible, correlations between the psychosocial variables and a measure of social desirability were low, suggesting that the participants' responses were not strongly related to this type of responding. In addition, only psychometrically sound measures of the constructs were used, and multiple indicators represented each latent variable, an improvement over Phan and Tylka's (2006) study. Even so, in future studies, researchers might use other methods—such as observation, clinical records, and parent/peer reports—to measure the constructs of interest.

Second, the Perceived Pressure factor was examined through measures that asked about the general influence of the media and peers on individuals' perception of their need to adhere to the thin ideal. Because the potential influences of family were not considered, future research should expand how the pressures construct is represented to include measures of family influences. Such an approach would allow for a determination of the relative impor-

tance of the media, friends, and family members in communicating societal pressures regarding beauty and body.

Third, there is a possibility that entering all participants into a raffle for a cash prize may have had an effect on the type of individuals who decided to participate in this study. Collecting data from the African American population is an extremely difficult task due, in part, to historic concerns regarding unethical treatment of African Americans in medical studies such as the Tuskegee, Alabama, study on African American men with syphilis (Mason, 2005). The raffle for a cash prize, along with extra credit in their college courses, was offered as a means of encouraging participation. Although the women may have had concerns about participating and providing self-reports on sensitive issues such as body image concerns, because Nikel A. Rogers Wood is herself an African American woman and conducted the majority of the data collection, participants were likely more comfortable answering her questions than they may have been answering the questions of a man or someone from a different ethnic group. Further, even if the participants had responded conservatively due to concerns about self-disclosure, the reality is that our findings were statistically significant, practically meaningful, and in the expected directions.

Fourth, because this study included only female African American undergraduates, generalizability is limited to similar groups of women. Thus, future research may want to test this study's model among other groups of female African Americans (e.g., high school students and women without a college education). In addition, although the general sociocultural model has now been validated among Asian American (Phan & Tylka, 2006) and African American women, it still needs to be tested among other groups of ethnic minority women, such as Mexican Americans, and to be expanded to include other potential risk factors (e.g., self-esteem, negative affect, perfectionism, and social support) and other potential outcomes (e.g., binge eating).

Fifth, because the model was tested with only cross-sectional data, longitudinal studies need to be conducted before statements about the variables being true risk factors can be made. But, as Stice (2002) argued, researchers should not spend the time and resources on longitudinal studies until the relationships under investigation have been established firmly through correlational designs.

Sixth, research has shown that self-esteem can directly reduce the risk of women developing symptoms of disordered eating (Button, Sonuga-Barke, Davies, & Thompson, 1996; Engler, Crowther, Dalton, & Sanftner, 2006) and can moderate the deleterious effects of body dissatisfaction (Vohs et al., 2001). Women with high self-esteem would be less vulnerable to adopting, and then responding to, societal messages about women's bodies. Although not directly measured in the current study, the positive effects of identification with one's ethnic group may occur through increases in self-esteem (Phan & Tylka, 2006). Additional research is needed, though, to understand for which ethnic minority women identification is associated with disordered eating and to determine the mechanism that underlies these seemingly protective functions.

### Conclusions

Although African American women do experience body image concerns and eating disorders (e.g., Grabe & Hyde, 2006; Lester &

Petrie, 1998b; Mulholland & Mintz, 2001; A. Roberts, Cash, Feingold, & Johnson, 2006), most of the research studies have involved comparisons between African American and European American women on a variety of psychological, attitudinal, and behavioral variables related to disordered eating (e.g., Abrams, Allen, & Gray, 1993; Striegel-Moore, Schreiber, Pike, Wilfley, & Rodin, 1995; Wilfley et al., 1996). Although such studies can provide comparative data on the prevalence of different psychological concerns, they are limited in two important ways. First, by comparing African American and European American women, researchers make the implicit assumption that European Americans are the “normative” group and others can be understood (or can be understood better) only in the context of how they are similar to or different from them. Thus, between-groups differences are often explained from a difference (or deficit) perspective such that African American women may be pathologized if their responses vary too much from the European American comparison group. Second, such studies generally fail to provide information about which psychosocial variables are actually associated with disordered eating among African American women. According to Root (2001), because risk factors may vary across different groups of women, researchers need to utilize within-subject designs and examine relationships in large groups of minority women so as to ascertain which variables are related to what outcomes among which ethnic groups.

In this study, we tested a socioculturally based model of eating disorders in a sample of African American women and thus replicated and extended prior research that had been conducted with European American women and those from other ethnic groups (Brumberg, 1988; Cavanaugh & Lemberg, 1999; Garner, 1993; Levine & Harrison, 2004; Low et al., 2003; Polivy & Herman, 2004; Stice, 2001, 2002; Thompson et al., 1999; Thompson & Stice, 2001). In addition, the findings indicate that ethnic identity may play an important role as well, being inversely related to internalization of societal beauty ideals. Additional research is needed to determine the extent to which sociocultural models apply to other ethnic groups and how identification may serve a protective function, as it does for African American women. As research determines the relative relationships between sociocultural and psychological variables and disordered eating, counseling psychologists can use this information to develop valid and effective interventions.

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