Several studies have found that many variables, such as sociocultural factors, body image disturbance, and poor interceptive awareness contribute to young women’s eating behavior (Brookings & Wilson, 1994; Cogan, Bhalla, Sefa-Dedeh, & Rothblum, 1996; Grisset & Norvell, 1992; Pike, 1995; Stice, Nemeroff, & Shaw, 1996; Tyka & Subich, 1996, 2004). The current societal standard of beauty is thinner than the average woman (Evans, 2003; Greenberg, Eastin, Horfschire, Lachlan, & Brownell, 2003; Lokken, Worthy, & Trautmann, 2004). Women who cannot achieve this ideal figure may experience a distorted body image and anxiety (Evans; Lokken et al.). Those women striving to change their body size to achieve this perfect body image may encounter various health disorders such as anorexia nervosa and/or bulimia nervosa. Each year, around five million Americans suffer from an eating disorder (Sullivan, Bulik, Fear, & Pickering, 1998).

Women who develop these eating disorders try different measures to achieve their ideal body size and, in this process, their body image may become distorted in their minds. This distortion encourages the onset of an eating disorder (Vohs, Bardone, Joiner, Abramson, & Heatherton, 1999; Williamson, Cubic, & Gleaves, 1993). Women with an eating disorder continue to consider their current body size to be larger than their ideal body size (Williamson et al.). In fact, body image disturbance is a criteria required for clinical diagnosis of anorexia nervosa and/or bulimia nervosa (American Psychiatric Association, 1994).

Women who do not have an eating disorder also may be at risk for body image distortions (Heatherton, 1993; Hsu, 1982; Zellner, Harner, & Adler, 1989). For example, women often base their self body image on what men think their body should look like, rather than on their actual body (Molloy & Herzberger, 1998; Patel & Gray, 2001). In addition, Evans (2003) found that women associate a thin body size with life successes. Even a small amount of weight gain can negatively affect a woman’s body image (Foster, Wadden, & Vogt, 1997). Weight loss treatment is associated with an increased rating of one’s appearance and body satisfaction (Foster et al.). Researchers have found that more than 80% of women report having one or more dieting behaviors daily (Mintz & Betz, 1988). Watching one’s weight is the norm for young adult women (Mintz & Betz).

* Faculty supervisor
More recent studies have demonstrated that race may also be a factor in body image perception (Barnett, Keel, & Conoscenti, 2001; Cogan et al., 1996; Molloy & Herzberger, 1998; Shaw, Ramirez, Trost, Randall, & Stice, 2004). Both African-American and Caucasian women are susceptible to developing an eating disorder; however, disordered eating tends to be more prevalent in Caucasians (Edwards-Hewitt & Gray, 1995; Lester & Petrie, 1998; Striegel-Moore & Smolak, 1996). African-American women are less likely to develop low self-esteem and/or inappropriate body images (Molloy & Herzberger, 1998; Patel & Gray, 2001). One reason may be that African-American men prefer larger women than do Caucasian men (Greenberg & LaPorte, 1996; Jackson & McGill, 1996; Rosenfeld, Stewart, Stinnett, & Jackson, 1999). African-American women are more accurate about estimating the body size preferred by African-American men, whereas Caucasian women assume that Caucasian men prefer thinner body types than they actually prefer (Patel & Gray, 2001).

The current study combined elements of previous research. Molloy and Herzberger (1998) examined whether self-esteem and body image differ across race. Mintz and Betz (1988) assessed the type and occurrence of eating disorder behavior among college women and explored the attitudes of women classified into different eating categories. The general purpose of our study was to examine body image and its relationship to eating behaviors among African-American and Caucasian women. We hypothesized that Caucasian women would have a lower body satisfaction and a higher degree of unhealthy eating behaviors than African-American women. We also expected that the higher the level of body satisfaction, the lower the degree of unhealthy eating behaviors.

Method

Participants

Participants were 75 Caucasian and 70 African-American undergraduate women enrolled in a southeastern public university. Three participants of other races were excluded from the study. The mean age was 20.66 (SD = 2.94). The participants were recruited from different classes at the university. Some students received extra credit for participating depending upon the professor. Sixty percent of participants were in a relationship and 40% were not. All participation was voluntary.

Materials

The Questionnaire for Eating Disorder Diagnoses (Mintz, O’Halloran, Mullholland, & Schneider, 1997) was administered. The Questionnaire consisted of questions related to the following topics: past and current weight, exercise, dieting, and attitudes or behaviors about eating or binging. The participant’s responses were obtained on 6-point Likert scale or by yes or no answers. The scoring manual for The Questionnaire for Eating Disorder Diagnoses (Mintz et al., 1997) used the participants’ height and weight to convert it to a Body Mass Index (BMI). After the BMI was determined, the participants were categorized into specific weight categories. After a weight category was determined, the participants were diagnosed into one of the following categories for either eating-disordered (Anorexia, Bulimia, Subthreshold Bulimia, Menstruating Anorexia, Binge Eating Disorder, Non-binging Bulimia) or non-eating disordered (Symptomatic or Asymptomatic behavior). These categories are based on diagnostic criteria from the DSM-IV. These diagnoses were originally found in the study conducted by Mintz et al., 1997). In addition, in a demographic questionnaire, participants were asked to rate themselves on a 3-point scale as an unhealthy eater, a healthy eater, or a very healthy eater.

Participants also completed the Body Esteem Scale (Franzoi & Shields, 1984). This tool was used to allow the participants to rate their body image. The Body Esteem Scale (BES) consisted of 35 items. The participants rated the items dealing with sexual attractiveness (termed sexual attractiveness body esteem), weight concern (termed weight concern body esteem), and physical condition (termed physical condition body esteem) on a 5-point scale according to how satisfied or dissatisfied they were with their bodies. The scale ranged from 1 = have strong negative feelings to 5 = have strong positive feelings. The higher the score, the higher the participant’s body esteem in that category. In other words, reporting higher weight concern body esteem would indicate that a woman feels better about her weight. The total body satisfaction/esteem score was obtained by adding the responses in each of the three categories (sexual attractiveness, weight concern, and physical condition). This test allowed us to determine each participant’s overall body image by assessing her satisfaction with her own body.

Procedures

Surveys were distributed in group settings. The participants completed the Questionnaire for Eating Diagnoses followed by the Body Esteem Scale. The demographic survey was given last to minimize any priming that may have resulted from the questions asked. No person-identifiable information was collected.

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Results

Independent t tests revealed no significant differences between African-American and Caucasian women on age, height, weight, body mass index, body frame, or weight category. In contrast, African-Americans had higher scores (higher self-esteem) on the following body esteem scales: sexual attractiveness, t(143) = -4.96, p < .01; weight concern, t(143) = -5.84, p < .01; and physical condition, t(143) = -2.57, p < .05. African-Americans also reported a higher ideal weight than Caucasian women, t(137) = -2.25, p < .05. On the self-rating of eating habits, Caucasian women reported better eating habits than African-American women, t(143) = 2.01, p < .05. The means are depicted in Table 1.

The majority of women (71%) categorized themselves as having healthy eating habits (See Table 2). An ANOVA was used to compare women across the three eating habit categories (unhealthy, healthy, and very healthy). These groups did not significantly differ on age or height. There were significant differences on weight, F(2, 140) = 15.69, p < .01; BMI, F(2, 140) = 13.99, p < .01; and body frame, F(2, 142) = 7.38, p < .01. Post-hoc tests revealed that women in the unhealthy category weighed more, had higher BMI scores, and larger body frames than women in the other two categories. There was also a significant difference in ideal weight, F(2, 136) = 6.85, p < .01, with women in the unhealthy category reporting a higher ideal weight.

The three eating habit groups did not differ on sexual attractiveness body esteem; however, there were significant differences for body esteem about weight concern, F(2, 142) = 6.67, p < .01 and body esteem about their physical condition, F(2, 142) = 6.58, p < .01. Post-hoc tests revealed that women in the unhealthy category had lower body esteem about their weight and about their physical condition than women in the other two categories.

Although the majority of women rated themselves as having healthy eating habits, only 10.4% of participants were diagnosed as ‘asymptomatic normal’ based on the Eating Disorder Diagnoses Questionnaire. Eighty percent of women reported some symptoms of chronic dieting or disordered eating behaviors and 4.2% fit the criteria to be diagnosed with an eating disorder. More Caucasian women were categorized as having an eating disorder or engaging in chronic dieting than were African-American women. The frequencies are depicted in Table 3.

We further categorized women into 3 groups: Asymptomatic, Symptomatic, and Eating Disordered. The three groups did not differ on ideal weight or sexual attractiveness body esteem. However, they did differ on weight, F(2, 140) = 3.64, p < .05; weight concern body esteem, F(2, 141) = 3.56, p < .05; and physical condition body esteem, F(2, 141) = 9.82, p < .01. Post-hoc tests revealed that women with diagnosable eating disorders weighed more and had lower weight concern and physical condition body esteem.

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**TABLE 1**

<table>
<thead>
<tr>
<th></th>
<th>Sexual Attractiveness</th>
<th>Weight Concern</th>
<th>Physical Condition</th>
<th>Ideal Weight</th>
<th>Eating Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>53.06*</td>
<td>36.66*</td>
<td>32.99**</td>
<td>132.54**</td>
<td>1.66*</td>
</tr>
<tr>
<td></td>
<td>(8.04)</td>
<td>(9.40)</td>
<td>(6.90)</td>
<td>(18.22)</td>
<td>(.48)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>46.83</td>
<td>27.93</td>
<td>29.87</td>
<td>126.00</td>
<td>1.81*</td>
</tr>
<tr>
<td></td>
<td>(7.08)</td>
<td>(8.60)</td>
<td>(7.70)</td>
<td>(16.12)</td>
<td>(.46)</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

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**TABLE 2**

<table>
<thead>
<tr>
<th>Eating Habit Categories</th>
<th>Very Unhealthy</th>
<th>Healthy</th>
<th>Very Healthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>40.0</td>
<td>103.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Percent</td>
<td>27.6</td>
<td>71.0</td>
<td>1.4</td>
</tr>
</tbody>
</table>

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An independent $t$ test was used to compare women who were in a relationship with women who were not in a relationship. No significant differences were found between these categories of women on height, weight, BMI, age, body frame, ideal weight, eating habits, weight category, sexual attractiveness body esteem, and weight concern body esteem.

Several correlations were found between variables. Women who weighed more had a larger body frame, $r(107) = .63, p < .01$. Weight concern body esteem was negatively correlated with weight, $r(107) = -.43, p < .01$; meaning that the higher women’s body esteem related to weight, the lower their actual weight. Similarly, physical condition was negatively correlated with weight, $r(107) = -.21, p < .05$; indicating that the higher a woman’s body esteem about her physical condition, the lower her weight.

We also found positive correlations between weight concern body esteem and sexual attractiveness body esteem, $r(109) = .63, p < .01$; physical condition body esteem and sexual attractiveness body esteem, $r(109) = .61, p < .01$; and weight concern body esteem and physical condition body esteem, $r(109) = .64, p < .01$. In other words, high body esteem in one category was related to high body esteem in all categories.

## Discussion

The results of the current study supported our hypothesis that African-American women would have a higher body satisfaction than Caucasian women. We found that African-Americans rated their sexual attractiveness, weight concern, and physical condition body esteem higher than Caucasian women, even though their physical structure (height, weight, etc.) did not differ. These findings match the results of previous studies (Molloy & Herzberger, 1998; Patel & Gray, 2001).

Our results also showed that African-American women had a higher ideal weight than Caucasian women. One possible explanation is that African-American women feel better about their bodies in general and thus, may be more accepting of themselves at a heavier weight. Another possibility is that this attitude may reflect the fact that African-American men tend to prefer heavier body types than do Caucasian men (Rosenfeld et al., 1999). Finally, this racial difference mirrors the media, which typically portrays African-American women at a heavier weight than Caucasian women (Gerbner, Gross, Morgan, & Signorelli, 1994).

### TABLE 3

<table>
<thead>
<tr>
<th>Frequency for Eating Behavior Diagnoses by Race</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Overall Frequency</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Asymptomatic Severely Underweight</td>
</tr>
<tr>
<td>Asymptomatic Low Weight</td>
</tr>
<tr>
<td>Asymptomatic Normal</td>
</tr>
<tr>
<td>Asymptomatic Overweight</td>
</tr>
<tr>
<td>Asymptomatic Moderately Obese</td>
</tr>
<tr>
<td>Symptomatic Subthreshold Non-Binging Bulimia</td>
</tr>
<tr>
<td>Symptomatic Subthreshold Binge Eating Disorder</td>
</tr>
<tr>
<td>Symptomatic Binge Dieter</td>
</tr>
<tr>
<td>Symptomatic Subthreshold Behavioral Bulimia</td>
</tr>
<tr>
<td>Symptomatic Chronic Dieter</td>
</tr>
<tr>
<td>Symptomatic Other</td>
</tr>
<tr>
<td>Subthreshold Bulimia</td>
</tr>
<tr>
<td>Bulimia Purging Type</td>
</tr>
<tr>
<td>NonBinging Bulimia</td>
</tr>
<tr>
<td>Binge Eating Disorder</td>
</tr>
</tbody>
</table>
In addition to differences in body image, Caucasian women reported healthier eating habits than African-American women. Caucasian women had more insecurity and lower ideal weights, which might be a motivator to be more conscientious about their eating. In addition, there may be cultural differences in food intake. Granner, Sargent, and Calderon (2004) suggest that Caucasians have greater family encouragement for fruit and vegetable intake compared to African-Americans.

When examining the overall sample, we found that the majority of women exhibited symptoms of chronic dieting or eating disordered behavior. This finding is consistent with previous research which demonstrates high rates of dieting and eating disorders across college campuses (Klemchuk, Hutchinson, & Frank, 1990). Despite reporting these symptoms, most women categorized themselves as having healthy eating habits. This discrepancy raises the question of how young adult women define healthy eating. Women in the healthy and very healthy eating categories weighed less and reported lower ideal weights than women in the unhealthy eating category. It is possible that symptomatic eating allows these women to maintain lower weights, which is perceived as healthy by young adult women (Polivy & Herman, 1987). Another possibility is that when symptomatic eating is the norm among peers, that eating behavior is considered healthy.

A related issue might be the motivations behind the symptomatic eating behaviors. Putterman and Linden (2004) recently argued that chronic dieting for weight loss is more harmful than chronic dieting for health reasons. For example, heavy drinking in female college students is linked to chronic dieting, perhaps in an attempt to lose weight gained through alcohol consumption (Stewart, Angelopoulos, Baker, & Boland, 2000). In general, young women are more likely to diet in order to lose weight than are older women (Putterman & Linden).

Our second hypothesis was that the higher the level of body satisfaction, the lower the degree of unhealthy eating behaviors. This hypothesis was supported. Women who felt more positively about their weight and women who felt they were in good physical condition reported healthier eating habits. These results were similar to those of Mintz and Betz (1988) who found that higher body satisfaction related to lower rates of symptomatic eating behaviors. Women in our study had similar responses to women surveyed more than 15 years earlier, suggesting that these attitudes have been consistent over time.

We also found that women who weighed less had higher body esteem about their weight and higher physical condition body esteem. This finding suggests that women who weigh less feel better about themselves. These findings are consistent with previous research (Evans, 2003; Matz, Foster, Faith, & Wadden, 2002). In today’s society, thinness is a desired characteristic.

Previously, Molloy and Herzberger (1998) argued that women base their body image on what they believe men desire in women. In our study, women with a steady partner did not differ from women without a steady partner. This finding may suggest that other factors exert a stronger influence on young women’s eating behaviors. Alternatively, women may be basing their body image on men in general, rather than relying on a specific man’s opinion. If this were the case, then women would not need a partner to have an internalized image of a male preference.

Women who had overall high body esteem scores in one category (sexual attractiveness, weight concern, or physical condition) had high body esteem scores in all three categories. This implies that women tend to have global feelings about their body, rather than having unique attitudes about each category of body esteem. The only exceptions were found in women with diagnosable eating disorders and women in the unhealthy eating category. These women reported lower weight concern and physical attractiveness body esteem, but did not differ from other women on sexual attractiveness body esteem. This finding may indicate that sexual attractiveness is not linked to body size and deserves further investigation.

Future research also may want to address the relationship between body frame and eating behaviors. Our results indicated that women who have larger body frames weigh more and are more likely to report unhealthy eating patterns. We also found that women who were taller had unhealthy eating habits. It makes sense that women with a large body frame would weigh more. However, having a large body frame does not explain the reason behind unhealthy eating habits.

Counseling services at colleges and universities encounter significant numbers of women facing problems related to eating behaviors and weight-related issues (Kashubeck-West & Mintz, 2001). This study addresses a very timely issue, health disparities between black and white Americans in the United States. It addresses a topic area that will be of interest and use to counseling psychologists who focus on eating disorders in college populations. Because of the prevalence of eating disorders on college campuses, it is important for college students, professors, and others who come into contact with college women, to be educated about college women’s views of themselves and their weight. Early interventions of eating disorders are imperative for the present and future health.
of the woman with the disorder (Dixon-Works, Nenstiel, & Aliabadi, 2003). It is important to address this issue with women at a young age due to the fact that the highest incidence of disordered eating occurs in women during adolescence and young adulthood (Gandour, 1984). It is also imperative to counseling psychologists to realize this significance in a young female’s life while they are aiding her in the transition first from adolescence to young adulthood, and then from a young adult to an independent, autonomous adult. An increased understanding of a woman’s perspective of herself and her body image may enable counseling psychologists to guide her to make better choices for herself and her situation.

References

Evans, P. C. (2005). “If only I were thin like her, maybe I could be happy like her”: The self implications of associating a thin female ideal with life success. Psychology of Women Quarterly, 27, 299-214.


