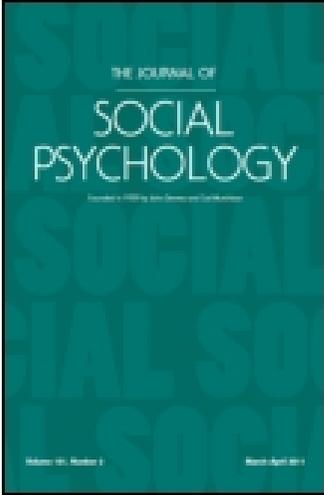


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Ethnic Differences in Women's Body Satisfaction: An Experimental Investigation

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ABSTRACT. This investigation was conducted so that a clearer picture of the complex relationship between ethnicity and body satisfaction could be obtained. Although body satisfaction has recently been shown to be influenced by several factors, such as mood, no studies investigating the stability of body satisfaction (to date) have examined whether there are ethnic differences in how such factors influence body satisfaction. Eighty-four White women and 33 Black women (U.S. undergraduates) were given bogus positive or negative social feedback so that the effect of the feedback on their body satisfaction could be determined. Results indicated positive feedback increased and negative feedback decreased the body satisfaction of White women in the expected directions, but there was no such effect for the Black women. The relevance of these findings in the understanding of bulimia nervosa and eating disorders is discussed, as is the need to differentiate between ethnic groups.

GIVEN THE PARTICULAR IMPORTANCE of sociocultural factors in the development of eating disorders (McCarthy, 1990; Stice, 1994), investigations of body image and eating behaviors of ethnic minorities can offer important insights into these phenomena (Dolan, 1991; Rucker & Cash, 1992). That Black women are at less of a risk for the development of anorexia and bulimia nervosa than White women (Gray, Ford, & Kelly, 1987; Hsu, 1987) has been well documented. In addition, studies have revealed that although Black women are, on average, heavier than White women (Rand & Kaldau, 1990), fewer Black women exhibit problematic eating behavior (Abrams, Allen, & Gray, 1993; Dolan, 1991), they possess greater body satisfaction (Harris, 1994; McCarthy, 1990),

*This study, conducted in fall 1994, is a component of Gregg Henriques's master's thesis.
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and they have less of a discrepancy between their perceived and ideal body size (Rucker & Cash, 1992). These ethnic differences probably are the result of variations in culture-bound values regarding the relative importance of thinness and appearance in women (Bowe, Tomoyasu, & Cauce, 1991; Garner, Garfinkle, Schwartz, & Thompson, 1980). In support of this notion, researchers have found that when Black women adopt more of the values of the predominant White culture, they report greater pressures to diet, and they exhibit more problematic eating behavior (Abrams et al., 1993; Andersen & Hay, 1985).

Most clinical theorists agree that negative body image and low body satisfaction play a crucial role in the etiology of eating disorders (Garfinkle et al., 1992; Streigle-Moore, 1993). Thus, the relatively low prevalence of eating disorders among Black women, compared with White women, may be attributable, in part, to the relatively greater satisfaction they have with their bodies (Rucker & Cash, 1992). In addition to differences in overall body satisfaction, however, there may also be differences among ethnic groups in the dimensions underlying body satisfaction, such as group members' susceptibility to being influenced by external stimuli.

Although body satisfaction has traditionally been considered a stable phenomenon, recent studies have indicated that reported body satisfaction can be influenced by several factors, such as the induction of a negative mood (Taylor & Cooper, 1992), exposure to thin models (Irving, 1990; Stice, Schupak-Neuberg, Shaw, & Stein, 1994), situational factors (Haimovitz, Lansky, & O'Reilly, 1993), and food consumption (Wardle & Foley, 1989). Some studies also suggest that bulimic women demonstrate more fluctuation in body satisfaction as a result of these types of manipulations than controls do (Hamilton & Waller, 1993; McKenzie, Williamson, & Cubic, 1993). Understanding the factors that influence body satisfaction is relevant because low body satisfaction has been found to be related to low self-esteem, vulnerability to depression, and anxiety (Dennison, Roth, & Gilroy, 1992; Mintz & Betz, 1986; Rosen, Gross, & Vara, 1987), as well as to eating disorders (e.g., Klemchuk, Hutchinson, & Frank, 1990; Mintz & Betz, 1988). Paralleling this research, studies have also demonstrated that depressed mood and situational factors that result in feelings of inadequacy are often triggers for binge eating behavior (for a review, see Polivy & Herman, 1993). In combination, these findings suggest that some women may experience concurrently both the urge to eat excessively and lowered body satisfaction; these conflicting feelings may contribute to the overall pathology observed in the eating disorders. Thus, ethnic differences in the manner in which body satisfaction is influenced by such factors may provide clues as to why White women appear to have a more conflictual relationship to food than Black women do.

The studies that have investigated fluctuations in body satisfaction have not differentiated among ethnic groups; thus, examinations of possible ethnic differences in this dimension of body satisfaction are nonexistent. Several studies have documented that self-esteem can be directly influenced by positive or negative

social feedback (for a review, see Fazio, Effrein, & Falender, 1981). Given the moderately high correlation between body satisfaction and self-esteem (Franzoi & Shields, 1984; Secord & Jourard, 1953) and the finding that body satisfaction can be influenced by external stimuli, we hypothesized that social feedback would influence body satisfaction in the expected direction. Thus, in the present experimental investigation, we examined the degree to which there are ethnic differences in the way body satisfaction is affected by positive or negative social feedback.

Method

Participants

The participants, 97 White women and 42 Black women, were students at a midsized southeastern U.S. university, who participated in the experiment in exchange for course credit. The mean age was 21.0 years for the White women and 20.1 years for the Black women.

Materials

Body Esteem Scale (BES). Body satisfaction was assessed with the Body Esteem Scale (Franzoi & Herzog, 1986; Franzoi & Shields, 1984). The BES lists 35 aspects of physical appearance and physical functioning. Participants rated each item on a 5-point scale; a 1 indicated strong dissatisfaction, and a 5 indicated strong satisfaction. An overall body satisfaction score can be obtained by summing across items. Participants were also asked to report their current weight, height, and ideal weight on a separate form.

Eating Disorders Inventory (EDI). The subscales of the EDI have been shown to possess adequate reliability (Eberly & Eberly, 1985) and criterion-related validity. Four subscales from the Eating Disorders Inventory were used (Garner, Olmstead, & Polivy, 1983). The four subscales are described as follows: Body Dissatisfaction measures dissatisfaction with the "maturational" areas of the body (thighs, hips, etc.); Drive for Thinness measures excessive preoccupation with weight and dieting and an intense pursuit of thinness; Bulimia measures the tendency toward episodes of uncontrollable overeating and self-induced vomiting; Interoceptive Awareness measures confusion and apprehension about emotional experience and difficulty identifying emotional experience. Items are scored on a 6-point Likert-type scale, with a higher number indicating a more deviant response (Klemchuk et al., 1990).

Social Rating Scale (SRS). The SRS was created by the experimenter. It listed five attributes: conversation skills, social skills, interpersonal skills, friendliness,

and overall first impression. After a brief social interaction, the participants were asked to rate one another on each attribute, using a 7-point Likert-type scale on which a higher number represented a more favorable rating.

Manipulation check. After receiving the positive or negative feedback, the participants completed a four-item manipulation check that measured their reaction to the feedback they had received. The manipulation check consisted of two items that connoted a positive reaction to the scores—"I was pleased with my scores on the social rating scale (SRS)" and "My scores on the SRS increased my self-confidence"—and two other items that connoted a negative reaction to the scores—"I was disappointed after I received my scores on the SRS" and "I felt rejected after I received my scores on the SRS." The participants rated each of the items on a 5-point scale that ranged from *very inaccurate* (1) to *very accurate* (5). The two positive items were negatively keyed, so a higher score indicated greater dissatisfaction with the feedback.

Deception check. After completing all the questionnaires, the participants were given a questionnaire indicating that the National Psychological Association was conducting a survey on the experience of participants in experiments. Imbedded in this brief questionnaire was a question asking participants to report and describe any deception involved in the experiment. Four participants (2 White and 2 Black women) correctly guessed the true nature of the experiment and were not included in any analyses. All other participants reported that there had been no deception.

Procedure

The experiment was conducted in three separate groups of approximately 45 participants and consisted of two separate sessions, 1 week apart. During the first session, the participants were introduced to the experiment and were told that the researcher was examining the relationship between first impressions and a variety of personal characteristics. The participants then filled out questionnaire folders that consisted of the BES and the subscales from the EDI in random order. After all participants had completed the questionnaires, they were asked to form groups of 4 or 5 on the basis of a randomly assigned group number found on the corner of their folder and were told that they had 7 min to introduce themselves and interact with one another. The participants were also given the SRS at this time and were told they needed to privately rate each group member on the SRS after the social interaction. After the social interaction, the participants completed the SRS and handed them in along with their questionnaire packets. This concluded the first session.

For the second session, 11 White and 7 Black women who had completed the first session did not return and were not included in any of the analyses. This

session began with the participants receiving the feedback manipulation. Every participant received a folder with her name on it. The first page inside the folder was an individual print-out created by the experimenter and had the participant's name on it. It consisted of scores and percentile rankings of the five categories on the Social Rating Scale. The participant's scores had supposedly been calculated from the aggregate ratings other students had given her. Before opening the folders, participants were instructed how to interpret the SRS (i.e., that a higher percentage score meant a better rating). The print-out scores were bogus, and half of the participants had been randomly assigned to receive scores that ranked them below the 10th percentile on each of the various social skills, whereas the other half received scores that ranked them above the 90th percentile. The participants then filled out the BES again, along with the manipulation check and the deception check. When every participant had finished with the questionnaires, they were completely debriefed regarding the true nature of the scores and of the experiment.

Results

The data from the remaining 84 White women and 33 Black women were used in the analyses. A one-way multivariate analysis of variance comparing the Black and White women on their reported weight and ideal weight as well as the scores on the Time-1 administration of the BES and the four subscales of the EDI revealed a significant overall difference between the two groups, $F(1, 115) = 3.67, p < .01$. (The mean scores for the measures comparing the Black and White women are presented in Table 1.) Multiple post hoc comparisons revealed that although the White women weighed less than the Black women, they had significantly lower scores on the BES and significantly higher scores on three of the four subscales of the EDI, indicating lower body satisfaction, more problematic eating behavior, and an increased drive for thinness.

A 2×2 (Ethnic Status \times Type of Feedback) analysis of variance (ANOVA) revealed that the type of feedback had a significant and expected effect on the manipulation check, $F(1, 113) = 51.8, p < .001$, suggesting that those who received positive feedback ($M = 9.8, SD = 1.6$) felt better about their scores than those who received negative feedback ($M = 13.45, SD = 3.2$). However, there were differences in the way the Black and White women responded to the manipulation check, $F(1, 113) = 9.9, p < .01$; the Black women showed a more positive overall score ($M = 11.0, SD = 2.8$) than the White women did ($M = 12.1, SD = 2.7$). There was no interactive effect, $F(1, 113) = 2.6, p > .10$, suggesting that the magnitude of the difference between the positive and negative feedback conditions was similar for the Black and White women.

Because of the repeated-measures design, we used a separate analysis to assess the impact of feedback on body satisfaction. A 2×2 analysis of covariance (ANCOVA), in which we used the Time-1 scores on the BES as the covari-

TABLE 1
Multiple Post Hoc Comparisons of Black and White Women From the
One-Way Multianalysis of Variance

Variable	Black women (<i>n</i> = 33)		White women (<i>n</i> = 84)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Reported weight	154.1	39.8	132.2	21.2
Ideal weight	136.0	18.0	120.5	13.5
Body dissatisfaction	32.1	11.0	36.9	11.3
Interoceptive awareness	21.3	6.1	24.6	8.2
Drive for thinness	18.7	8.3	24.1	8.5
Bulimia	11.8	4.7	13.8	6.0
Body esteem scale (Time 1)	124.9	21.1	116.3	21.0

Note. All post hoc comparisons except the bulimia subscale revealed differences significant at the $p < .05$ level.

ate to control for satisfaction before the manipulation, on the Time-2 BES scores revealed a main effect for type of feedback; the women who had received negative feedback felt worse about their bodies than those who had received positive feedback, $F(1, 112) = 10.35, p < .01$. The ANCOVA also revealed that there was an interaction between type of feedback and ethnic status, $F(1, 112) = 8.74, p < .01$. Post hoc analyses revealed that the body satisfaction of the White women was affected by the type of feedback, $F(1, 81) = 19.42, p < .001$; those White women who received positive feedback showed an increase in their scores on the BES ($M = 4.9, SD = 5.2$), and those who received negative feedback showed a decrease ($M = -2.3, SD = 5.7$) in their scores. The body satisfaction of the Black women was not significantly affected, however, $F(1, 30) = .534, p > .15$. In fact, those Black women who had received positive feedback showed a nonsignificant decrease in their scores on the BES ($M = -1.54, SD = 6.1$), and those who had received negative feedback showed a nonsignificant increase in their scores ($M = 0.64, SD = 5.7$). Thus, the type of feedback affected the body satisfaction of the White women only.

Discussion

The present results are consistent with those of previous studies in that Black women reported heavier ideal body weights, higher body satisfaction, less problematic eating behaviors, and less dietary restraint than White women did. These results are striking because, on average, the Black women were more than 20 pounds heavier than the White women.

The finding that body satisfaction can be directly influenced by cognitive and affective variables is also consistent with previous research (Taylor & Cooper, 1992). However, in the present experiment, we found that the impact of situational social factors on body satisfaction was greater for the White women than for the Black women. The finding that the body satisfaction of Black women was not affected by the positive or negative social feedback provides support for the notion that the dynamics underlying body satisfaction are different for Black and White women. This finding may be of particular importance to the understanding of why Black women are less at risk for the development of eating disorders. If White women's body satisfaction fluctuates in accordance with mood or situations that influence self-esteem but Black women's body satisfaction does not change similarly, then one can understand why White women are more likely to attempt to improve their self-esteem by increasing their body satisfaction. In addition, the finding that general social appraisal influences the body satisfaction of White women could be specifically relevant to understanding the pathology of bulimia nervosa, because women with this disorder are especially sensitive to the perceptions of others (Streigle-Moore, Silberstein, & Rodin, 1993).

The major limitation of this study resides in the uncertainty that the manipulation had precisely the same effect on both the Black and White women. The slightly different scores reported on the manipulation check suggest that there may have been some difference in the way the feedback influenced the two groups. For example, because the majority of the participants were White, possibly the Black women were less affected by the manipulation than the White women were. However, the lack of an interactive effect suggests that the differences in the positive and negative feedback conditions were similar for both the Black and White women.

This study was exploratory in nature and, as such, many questions remain. What are the precise factors underlying the ethnic differences in the relationship between body satisfaction and self-esteem? Are variations in culture-bound values related to the observed discrepancies in the change in body satisfaction scores? If so, what are these values, and can we use an understanding of these values to prevent the onset of eating disorders? Finally, this study demonstrated that, in future studies investigating the stability of body satisfaction, investigators would be well advised to differentiate between ethnic groups.

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