

A comparison of eating disorder scores among African-American and white college females

ELLEN F. ROSEN

College of William and Mary, Williamsburg, Virginia

and

DEREK L. ANTHONY, KAREN M. BOOKER, TERI L. BROWN, ERIC CHRISTIAN,
ROBERT C. CREWS, VIVIAN J. HOLLINS, JANE T. PRIVETTE,
ROSEMERRY R. REED, and LINDA C. PETTY
Hampton University, Hampton, Virginia

African-American and white college females participated in a survey of factors underlying eating disorders. On the average, the white women were more dissatisfied with their body shapes but had fewer feelings of distrust for others and less anxiety about maturity. Proportionately, almost two times as many white females scored in the upper 14% on the bulimia scale. These high-scoring white women were more concerned with being thin and had greater dissatisfaction with their body shapes than did the high-scoring African-American women.

Bulimia is an eating disorder characterized by episodes of eating binges lasting for about 2 h in which anywhere from 1,000 to 55,000 calories are eaten, usually in the form of sweets or salty foods. Typically, those afflicted are white college-age females (see, e.g., Johnson, Stuckey, Lewis, & Schwartz, 1983). Most of the studies on bulimia, however, have used samples from populations that are totally or predominantly white. In this study, we set out to obtain a sample from a predominantly African-American population and to compare this sample with one obtained from a predominantly white population. Samples from two different universities were used so that cultural differences were maintained. Hampton University and the College of William and Mary are universities in Virginia that are physically close together; each has a relatively long history. Students from both universities tend to come from middle-class family backgrounds. Both universities stress liberal arts at the undergraduate level.

METHOD

Subjects

A sample of 90 female, African-American students, all enrolled at Hampton University, and a sample of 77 female, white students, all enrolled at William and Mary, participated as subjects. The Hampton University students were invited to participate in the study by students enrolled in a computer course for social science majors taught by the last author. The William and Mary data were collected by the first author from students enrolled in her classes who were invited to participate in the study. No other selection criteria were used to determine who would be a subject in the study.

The data discussed in this paper were presented in part at the meeting of the Eastern Psychological Association in Buffalo, NY, April 1988. Correspondence should be addressed to Ellen F. Rosen, Department of Psychology, College of William and Mary, Williamsburg, VA 23185.

Procedure

The subjects were asked to fill out the eating disorder inventory, which was developed by Garner, Olmsted, and Polivy (1983) on the basis of their multimodal approach to an understanding of anorexia nervosa. The questionnaires were filled out anonymously. The scoring of the inventory leads to eight scale scores: drive for thinness, bulimia (primarily defined as overeating or bingeing), body dissatisfaction, ineffectiveness, perfectionism, interpersonal distrust, interoceptive awareness, and maturity fears.

RESULTS

Comparing the means for the two samples (white vs. African-American), there were significant differences on the body dissatisfaction scale (means of 13 vs. 9.2, respectively; $t = 3.47, p < .001$), interpersonal distrust (1.4 vs. 3.7; $t = -5.4, p < .001$), and maturity fears (1.5 vs. 2.6; $t = -3.57, p < .001$). The drive-for-thinness scale did not quite reach significance (means of 5.4 and 4.0; $t = 1.77, p < .08$).

The distribution of the bulimia scores was investigated more closely. About 85% of the scores for both samples were 3 or below. All subjects scoring 4 or above were selected for further investigation. This subsample contained 14 white and 9 African-American females (18% of the white sample and 10% of the African-American sample). The median weights were 56.8 kg for the white subsample members and 61.4 kg for the African-American subsample members. The median heights were 165 and 168 cm, respectively. None of the subsample subjects reported ever being more than 9.1 kg heavier than at present. Of these subsamples, 71% of the white women had a drive-for-thinness score greater than 10, as compared with 33% of the African-American women; 86% of the white women had a body-dissatisfaction score greater than 10, as compared with 56% of the African-American women.

DISCUSSION

This study demonstrates significant differences between white and African-American samples of female college students in self-perception variables related to eating disorders. On the average, white college females were more dissatisfied with their body shapes but had fewer feelings of distrust for others and fewer fears about becoming mature. There was some indication of less emphasis on thinness scores and greater body-dissatisfaction scores.

Thus, these results support the hypothesis of a racial difference in prevalence of eating disorder characteristics. This is probably due to cultural, rather than genetic, differences. Even among the women—white and African-American—scoring relatively high on the bulimia subscale, the white women had higher drive-for-thinness and body-dissatisfaction scores. This difference may reflect a socioeconomic scale difference, as has been reported to be true for anorexia nervosa (Garner, Garfinkel, & Olmstead, 1983). Anorexia is predominantly a problem of the upper and middle classes. As African-Americans become more affluent, the incidence of eating disorders may rise proportionately.

REFERENCES

- GARNER, D. M., GARFINKEL, P. E., & OLMSTED, M. P. (1983). An overview of sociocultural factors in the development of anorexia nervosa. In P. L. Darby, P. E. Garfinkel, D. M. Garner, & D. V. Coscina (Eds.), *Anorexia nervosa: Recent developments in research* (pp. 65-82). New York: Alan R. Liss.
- GARNER, D. M., OLMSTED, M. P., & POLIVY, J. (1983). The eating disorder inventory: A measure of cognitive-behavioral dimensions of anorexia nervosa and bulimia. In P. L. Darby, P. E. Garfinkel, D. M. Garner, & D. V. Coscina (Eds.), *Anorexia nervosa: Recent developments in research* (pp. 173-184). New York: Alan R. Liss.
- JOHNSON, C. L., STUCKEY, M. K., LEWIS, L. D., & SCHWARTZ, D. M. (1983). A survey of 509 cases of self-reported bulimia. In P. L. Darby, P. E. Garfinkel, D. M. Garner, & D. V. Coscina (Eds.), *Anorexia nervosa: Recent developments in research* (pp. 159-171). New York: Alan R. Liss.

(Manuscript received July 23, 1990.)

**9th International Symposium on Hearing
Auditory Physiology and Perception
Carcans, France
June 9-14, 1991**

The 9th symposium in this triennial series, to be held in the resort of Carcans near Bordeaux in southwestern France, is intended to bring together physiologists and psychoacousticians for the reciprocal presentation of progress in hearing research and the promotion of interactive exchanges. The symposium will include several invited tutorials on recent progress made in research in cochlear physiology and perceptive processes, as well as classical presentations of on-going research.

About 70 papers will be selected for presentation and publication in the proceedings, with preference being given to novel results and to presentations that have a bearing on both physiology and perception.

To encourage the exchange of ideas, a brochure of preprints of the presentations will be precirculated to all participants, and discussants will have the opportunity, during the meeting, to write their own comments, which will appear in the final publication of the proceedings.

For further information, contact Yves Cazals, Laboratoire Audiologie Experimentale, Inserm Unite 229, Hopital Pellegrin, Place A. Raba Leon, 33076 Bordeaux, France (phone, 56 24 20 47; Fax, 56 96 29 84; e mail, CAZALSY at FRBDX11).