

Exploring Attitudes Towards Body Weight and Eating Behaviors of Women in College

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Abstract

A study was designed to assess attitudes towards body weight, dieting practices, and symptoms of eating disorders among college-age women. Of the 242 students surveyed, 86 percent desired some amount of weight loss, almost half wanting to lose 10 or more pounds. Achieving their goals would put the majority (63 percent) within just 5 pounds of their weight for height minimum (assuming a small frame), while 17 percent would end up 6 or more pounds *less* than their minimum weight for height. Few of those desiring any amount of weight loss would actually be considered overweight by health care professionals. The 8 percent satisfied with current weights were quite thin ($BMI=19.1 \pm 0.41$). Boyfriends were cited most frequently as a source of pressure to maintain a certain weight, but mothers were more likely to have encouraged dieting. Those feeling pressure to maintain a certain weight were more likely to report unhealthy dieting practices, and to be preoccupied with dieting and their body weight. Unrealistic expectations regarding desirable weight and sources of pressure to maintain a certain weight -- both of which can lead to unhealthy eating practices -- are issues that need to be addressed in Cooperative Extension programming efforts.

Introduction

The North Carolina Cooperative Extension System offers healthful, research-based weight-loss programs across the state that are intended to assist overweight adult participants in achieving and maintaining healthy body weights. While these programs provide sound information, it is important for educators to be aware that dieting to lose weight and limiting total food intake can progress to a dangerous and obsessive level for some people. Many people are dieting when they don't need to be, causing them to reduce their intake of many essential nutrients. It is also important for educators to be aware of the sources of pressure to diet so as to better focus their programming efforts.

An estimated 10 percent of high school and college students, primarily female, suffer from some type of eating disorder resulting from the desire to be thinner than they are, whether or not they are overweight (Berg 2000). Even those who don't meet the clinical definition of an eating disorder may be engaging in behaviors and harboring attitudes that could compromise their physical as well as their mental health. Because of the prevalence of eating disorders on college campuses, a survey was developed to assess female students' attitudes toward body weight and experiences with dieting, and the symptoms of eating disorders. In particular, we were interested in determining what college-age women perceive as "desirable" weight.

- Are their weight goals realistic?
- Do they conform to current guidelines?
- How much weight would have to be lost to meet that goal?
- Are their current weights different from today's health standards?

In addition, we wanted to examine the possible forces that shape their attitudes and resultant behaviors, something we had seen little written about in the literature. From whom do they feel pressure to attain or maintain a certain body weight and who has actually encouraged them to diet -- are they the same or different?

Methods

A survey instrument was developed in conjunction with the university's Student Health Services, reviewed for content validity by the Cooperative Extension Service, and for face validity, suitability, and appropriateness by the university's Panhellenic Council. It was revised to improve clarity and focus, and given final approval by the university's Use of Human Subjects in Research Committee.

The questions were designed to assess attitudes toward and behaviors associated with weight loss and body image. Respondents were asked questions regarding

- current weight and height,
- desirable weight,
- body weight satisfaction,

- frequency of behaviors associated with eating disorders, including binge eating, vomiting, fasting, and use of laxatives and diet pills,
- the types of weight control strategies used most frequently,
- whom they felt pressure from to lose and/or maintain a certain weight, and
- who had encouraged them to diet.

The sample consisted of members of four out of eight sororities willing to participate. Of the 400 surveys distributed, 242 were completed and returned, for a 61 percent response rate. The average age was 19.9 ± 2.5 . Ninety-seven percent were Caucasian, 2 percent Hispanic and 1 percent African American. Basic descriptive statistics were used to profile respondent behaviors. For comparisons among respondents, groups were sorted by identified behaviors and profiled with descriptive statistics. Respondent results concerning desirable weight were compared to the Metropolitan Life Insurance Company Weight for Height Table. Since frame size was not measured, the lowest weight for each height for the smallest frame size was used. This is referred to as their "minimum weight for height."

Results

Perception of desirable weight

Eighty-six percent of the students desired some amount of weight loss. Achieving their goals would put the majority (63 percent) within just 5 pounds of their minimum weight for height and 17 percent would end up 6 or more pounds *below* their minimum weight for height. As indicated in Table 1, a slight majority thought they were within 10 pounds of their goal weight, but almost half wanted to lose 10 or more pounds. The greater the desired weight loss the greater the average body mass index (BMI). Only 8 percent of respondents indicated satisfaction with their current body weight, however, this group was already quite lean, with an average BMI of 19.1 ± 0.41 .

Reported current weights compared to standards

While the vast majority of the women surveyed perceived their desirable weights to be less than what they currently weighed, almost all of their current weights were well within today's standards and not in need of additional weight reduction. The BMIs for these women, as shown in Table 2, indicate that few would be considered by a health professional to be overweight.

Pressures to maintain body weight and eating behavior

When students were asked if they felt pressure to maintain a certain body weight, 56 percent responded positively. The three most commonly cited sources of that pressure were boyfriends, followed by girlfriends, and mothers (Table 3). The table also indicates who had actually encouraged them to lose weight. This time, mothers were cited most often, while boyfriends were cited only about half as many times as before. In Table 4, it can be seen that those who said they felt pressure to maintain a certain body weight were also more likely to have been on a diet, not kept off any lost weight, and were more likely to use potentially unhealthy dieting methods such as skipping meals, fasting completely, and using diet shakes, diet pills, and laxatives. Table 4 also shows that these students reported more frequent binge eating and were more likely to self-report an eating disorder as compared to those who did not feel pressure to maintain a certain body weight.

Discussion

The vast majority of respondents listed a desirable weight less than their current weight, as has been noted in this college-age population for over ten years (Monteath and McCabe 1997; Schulken et al. 1997; Birtchnell and Lacy 1989). While it is not surprising that these young women desire thinness, what is of concern is just how thin some want to be, and/or how much weight they would have to lose to get there. Over a third would have to lose 10 to 19 pounds, and for almost one in ten, 20 pounds or more would have to be shed. The greater the desired weight loss, the greater the current weight, suggesting that all students have similar perceptions of the "ideal" figure. Most students reported desirable weights within just 5 pounds of their minimum weight for height value, and almost one in seven gave weights 10 or more pounds lower. Although some have argued that current weights for heights are too generous (Manson et al. 1995), the BMI of the majority of these women was less than or equal to 22 kg/m² which is well within the National Institutes of Health's guidelines of 18.5 - 24.9 kg/m² for this age group (National Institutes of Health 1999).

What are the implications associated with unrealistic expectations regarding body weight? Obviously someone who wants to weigh less is likely to go on a diet. Fifty-nine percent of the respondents indicated that they had dieted at least once, and on average, four times during the previous year. Increasing research indicates that dieting itself is associated with weight gain (Coakley et al. 1998; Korkeila et al. 1999). In addition, repeated dieting failures may have psychological consequences, compounding the risk for depression that has been shown to increase with body image dissatisfaction in this age group (Koenig and Wasserman 1995; Oates-Johnson and DeCourville 1999). Chronic dieting, and the habitually low total food intake associated with it, may also result in low levels of intake of a variety of essential nutrients. According to the United States Department of Agriculture's 1994 Continuing Study of Food Intakes, women 20 years and older report an average intake of only 1600 calories a day, with below RDA levels of intake of calcium, iron, magnesium, zinc, and vitamins E and B-6 (United

States Department of Agriculture 1994). Finally, dieting itself is also a risk factor for eating disorders in general, and binge eating in particular (Story et al. 1991; National Institutes of Health 1992). Over a quarter of all students surveyed reported binge eating two or more times in the previous month.

Clearly the relative few who did perceive their current weight to be desirable did so more because they were already quite thin, as has been found by others (Pingitore, Spring, and Garfield 1997), rather than being willing to accept a more "average" or "typical" weight. However, those who actually wanted to weigh more were even thinner, which suggests that there is a lower limit of acceptable leanness.

The finding that young women cited boyfriends most frequently as the primary source of pressure to attain and/or maintain a certain body weight, while mothers were most likely to have actually encouraged dieting, is important for several reasons. First, it suggests that perception may not match reality. It is well-known that college-age women will identify a leaner shape as being "desirable" than college-age men (Fallon and Rozin 1985). This has been shown to be true in older women as well (Fallon and Rozin 1988). If women had a better understanding of men's attitudes towards body weight, the pressures to lose that are associated with both unsuccessful and unhealthy dieting, may be decreased. Discussions of weight loss should therefore always begin with an honest appraisal of the individual's stated weight goal and what is motivating her to attempt to lose weight.

This research finding also suggests that mothers themselves should be targeted in programming efforts to decrease the development of irrational body image perceptions that can lead to unhealthy disordered eating patterns and eating disorders among their daughters. Research has found that body image dissatisfaction may be set as early as age 12 (Kostanski and Gullone 1998), and a survey done by Childress et al. (1992) found that 55 percent of middle school girls wanted to lose weight, and 42 percent had actually dieted. Others have shown that these young dieters are more likely to have mothers who diet (Pike and Rodin 1991), and a recent study by Edmunds and Hill (1999) found that parental control of eating was associated with greater degrees of dietary restraint in a group of 12-year-old children. Maternal restriction of food intake in young children has also been shown to be associated with a decreased ability of those children to self-regulate their eating behavior (Birch and Fisher 2000). Thus, it is critical that Family and Consumer Science Educators and other professionals recognize the key role that the home environment, and mothers in particular, play in the development of healthy eating practices.

Conclusions

While eating disorders associated with attitudes towards body weight have broader causes than just dietary factors, the results of this study and others point out the importance of stressing

healthy body weight and healthy eating habits in programming targeted to females of all ages. The Health Belief Model (Rosenstock 1982) suggests that if an individual believes, in this case, that her current body weight is desirable and that attempts at weight loss could be detrimental, then she will be more accepting of her weight and less inclined to diet. Program sessions could be designed as interactive pieces of dialogue and/or role playing, in which participants explore attitudes and discuss the different body images that males and females prefer. As this study's findings suggest, it is also important to be aware that perceptions regarding body weight can be passed down to successive generations. In this regard, discussions might be planned to focus on the problems associated with different body weight-to-height combinations and how to work youngsters and their parents through this issue for ultimate healthy body image attitudes and outcomes.

Table 1. Weight loss desired by students (a) (n = 214)

Desired weight loss (pounds)	%	BMI (b) \pm SE
1-5	36	20.2 \pm 0.12
6-9	17	20.8 \pm 0.22
10-19	38	21.6 \pm 0.15
\geq 20	9	24.0 \pm 0.42

(a) Difference between reported "desirable" weight and current weight

(b) BMI: Body Mass Index = Weight (kg) / height (m)²

Table 2. Distribution of body mass index (BMI) based on current weight of students desiring weight loss (n = 214)

BMI	%
< 19	5
19-22	79
23-25	15
> 25	1
Total	100

Table 3. Sources of pressure to maintain certain weight and lose weight (n = 139)(a)

Question	Boyfriends %	Girlfriends %	Mother %
From whom do you feel pressure to maintain a certain weight?	68(a)	61	36
Who has encouraged you to lose weight?	36	24	55

(a) More than one source could be checked, so totals exceed 100 percent.

Table 4. Frequency of eating behaviors of total survey group and those who feel pressure from others to maintain weight

Behavior		Total Group (n=248) %	Those feeling pressure to maintain certain weight (n=139) %	Those who report eating disorder (n=40) %
Dieted in past year		59	72	78
Did not keep weight off		54	80	47
Dieting practices	Decrease total calories	38	54	56
	Skip meals	29	37	46
	Use diet shakes	14	27	17
	Fast completely	6	8	22
	Use diet pills	4	7	15
	Use laxatives	2	3	7
Binged 2 or more times in last month		10	17	34
Vomited 2 or more times in last month		12	9	20

Self-reported an eating disorder	16	28	100
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