A Prospective Study of Disordered eating among College Students

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The prevalence of disordered eating among college students was assessed at the beginning and the end of the freshman year. The study aimed to identify factors related to worsening of disordered eating during the year. Questionnaires were completed by 590 males and 450 females at baseline and 546 males and 403 females at follow-up. At baseline, the prevalence of bulimia nervosa was 3.8% for females and 0.2% for males. The prevalence of disordered eating symptoms was considerably higher. The prevalence of bulimia nervosa at follow-up was virtually unchanged. However, many students experienced an onset of disordered eating during the year. Analyses of changes during the year revealed that worsening of disordered eating among females was associated with increasingly dysphoric feelings about weight, decreased ratings of their attractiveness, high perceived stress, increased weight dissatisfaction, and increased ineffectiveness.

The reputed widespread prevalence of eating disorders on university campuses has caused considerable concern in both the general and professional communities. Prevalence estimates of the symptoms of eating disorders in college females have ranged as high as 90% for binge eating (Hawkins & Clement, 1980) and 12% for vomiting (Halmi, Falk, & Schwartz, 1981). Reports of the prevalence of bulimia nervosa have varied widely across studies, probably due to discrepancies in diagnostic criteria, sampling, and frequency criteria (for review, see Connors & Johnson, 1987).

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Disordered eating can be conceptualized along a continuum, ranging from unconcern with weight and normal eating, to “normative discontent” with weight and moderately disregulated/restrained eating, to bulimia nervosa (Rodin, Silberstein, & Striegel-Moore, 1985). Although “normative discontent” does not merit categorization as a psychiatric diagnosis, it both can cause considerable distress in its own right and can be a potential risk factor for development of the full clinical syndrome of bulimia nervosa (Polivy & Herman, 1987; Striegel-Moore, Silberstein, & Rodin, 1986). An accurate representation of the prevalence of eating disorders as a problem among college students should include and distinguish between the incidence of the clinical syndrome of bulimia nervosa and the prevalence of various behavioral symptoms, such as binge eating, purging, and dieting. In addition, “normative discontent” is characterized by dysphoric affective responses to weight, such as feeling out of control, ashamed, and displeased. The current study sought to examine both the behavioral and affective dimensions of the disordered eating continuum in college students.

Reports of strikingly high rates of eating disorders on campus have led to the widespread belief that the college experience may increase the risk for development of an eating disorder. The lack of prospective research to address this issue comprises a major gap in the current literature. Several hypotheses are plausible about the potential impact of the college experience on eating disorders. The intense academic and social pressures of campus life may increase vulnerability to developing a wide range of clinical symptoms, disordered eating among them. Although a relationship between stress and eating disorders is often assumed, research on the association remains inconclusive (for review, see Cattanach & Rodin, 1988). Perhaps those individuals who feel most stressed by, and least effective in, coping with the pressures of college would be at heightened risk for an increase in disordered eating.

In addition to the general pressures of college life, specific pressures towards thinness may prevail on campus. A competitive school environment may foster not only academic competition but also competition regarding the achievement of an outstanding (i.e., thin) body. Individuals who strive for achievement and competition in the academic domain may also feel compelled to “achieve” in the weight domain. Alternatively, a competing hypothesis can be postulated. An individual who places great importance on academic achievement and competition may base her sense of self-worth primarily on academic accomplishments and, as a result, place relatively little emphasis on such dimensions as appearance and weight. Thus, an important empirical question is whether academic achievement motivation and competition correlate with or counterbalance aspirations toward thinness among college students.

Finally, an additional relationship between achievement orientation and disordered eating can be derived from Horner’s (1972) concept of fear of success. Some women may feel that rigorous pursuit of academic excellence produces conflict with their traditional female sex role. As Spence (1985) suggests, a felt challenge to gender identity may prompt an increase in sex role congruent behaviors. A focus on appearance and weight, therefore, may serve to reaffirm a woman’s feminine identity.

The current study was designed to address an important but little studied prospective question: what variables predict an increase in disordered eating over the course of the first year in college? To address this question, the current investigation consisted of two phases. At baseline, the entire class of stu-
dents was surveyed as they arrived on campus for their freshman year for the
prevalence of disordered eating symptoms and the clinical syndrome of bu-
limia nervosa. The follow up phase of data collection included a reassessment
of the same cohort of students at the completion of their freshman year. It ex-
amined changes in symptoms of disordered eating during the course of the
year and sought to relate symptomatic changes to the variables outlined above. In
addition, it examined the association between changes in disordered eating and
students' perceptions of the stress they experienced during the freshman year.

**METHOD**

**Subjects**

**Baseline**

During course registration, questionnaires were distributed to all 1,364 stu-
dents in the entering freshman class of a competitive northeastern university.
Questionnaires were returned by 1,086 students. Forty-six subjects had to be
dropped because of incomplete data. The remaining sample of 1,040 students
represented 74.5% of the freshman class. The sample consisted of 590 male and
450 female students (73.8% and 79.6%, respectively, of each gender in the
freshman class). The mean age was 17.85 years (SD = .049) for males and 17.68
years (SD = 0.56) for females. A question about race was answered by 1,028
respondents. Of these, 20% indicated that they belonged to a minority group.
The majority of these students were Asian, Black, or Hispanic. This was a rep-
resentative proportion of minority students in the freshman class.

**Follow-up**

A total of 962 students (70.5% of freshman class registered at the time) com-
pleted the second questionnaire. After 13 subjects were eliminated owing to in-
complete data, 403 female and 546 male students remained (representing
71.3% and 68.3%, respectively, of the freshman class). To match each respon-
dent's initial and follow-up survey, the following data were checked for con-
cordance: the subject's personal 8-digit identification code (month and day of
each parent's birthdate), age, race, and height. Subjects with inconsistent in-
formation on these key identifying variables were discarded from the matched
sample. Matching questionnaires using stringent criteria were identified for 342
male and 330 female students who participated in both phases of data collection.

**Measures**

**Body Weight**

Body weight was calculated as percent overweight according to Metropolitan
Life Foundation (1983) norms for age, height, and gender.

**Body Image**

Three aspects of body image were assessed at both points in time. First, 
_Weight Dissatisfaction (WD)_ was calculated by subtracting the subjects' desired
weight from their current weight. Second, a five-item scale, *Feelings About Weight*, was constructed to measure subjects' emotional reactions to their body weight. Subjects rated how they felt about their weight on a seven-point scale (ranging from not at all to extremely) for five feelings: out of control, pleased (negatively keyed), heavy, concerned, and ashamed. High scores reflected strong negative feelings about weight. Adequate interitem reliability was established both for males (α = .72) and females (α = .87). Third, subjects rated their *Perceived Attractiveness* relative to their peers on a seven-point scale (ranging from extremely more attractive to extremely less attractive).

**Symptoms of Disordered Eating**

Symptoms of disordered eating were elicited at both baseline and follow-up measurements. These symptoms were considered in two ways in this study: as discrete behaviors and as a constellation of symptoms. First, the study examined separately the behaviors of dieting, binge eating, and purging through a series of questions tapping the frequency of each. Binge eating and purging were rated on a five-point scale ranging from never to daily, and dieting was rated on a seven-point scale ranging from “only once or twice ever” to “all the time.” In addition, three items were taken from the Eating Disorders Inventory (Garner, Olmsted, & Polivy, 1983; Garner & Olmsted, 1984) and were rated on a six-point scale ranging from never to always. These items tapped feeling out of control during eating binges, guilt after eating, and extreme fears of weight gain.

Second, a five-item *Disordered Eating Symptoms Scale* (DESS) was developed that incorporated the key behavioral features of bulimia nervosa as defined by DSM-III-R (American Psychiatric Association, 1987), including dieting, binge eating, and purging. In addition, two attitudinal dimensions were included: guilt after eating, and extreme fear of weight gain. In order to form a composite score, the items were assigned weights in order to reflect the different degrees of severity of disordered eating represented by the attitudes and behaviors. The attitudinal items were multiplied by a factor of 1, dieting by a factor of 2, binge eating by a factor of 3, and purging by a factor of 4. The scale had satisfactory interitem reliability for females (α = .77), but not for males (α = .35). Therefore, the symptom scale was not used for any analyses involving male subjects.

**Perfectionism and Ineffectiveness**

Two subscales of the Eating Disorder Inventory (EDI; Garner & Olmsted, 1984) that tap personality dimensions hypothesized to be related to eating disorders were administered at both phases. The six-item Perfectionism subscale measures excessive personal expectations of achievement. The 10-item Ineffectiveness subscale measures feelings of inadequacy and negative self-evaluation. Subjects rated each EDI item on a six-point scale ranging from never to always.

**The Work and Family Orientation Questionnaire**

The four subscales of the Work and Family Orientation Questionnaire (WOFO; Helmreich & Spence, 1978) were administered at baseline. The Work
scale consists of six items that indicate a positive attitude toward work. The eight-item Mastery scale measures preference for difficult and challenging tasks. Competitiveness includes five items that tap a desire to win in interpersonal situations. Personal Unconcern consists of four items that tap Horner’s (1972) construct of fear of success, with high scores reflecting a lack of concern with the negative reactions of others to personal achievement. Subjects rated each of the WOFO items on a five-point scale, ranging from strongly agree to strongly disagree.

Perceived Stress Scale
At follow up, the 14-item Perceived Stress Scale (Cohen, Kamarck, & Mer- melstein, 1983) was included. This scale measures the degree to which various situations are appraised as stressful. Subjects were asked to rate each item on a five-point scale (ranging from never to very often) in terms of how they had felt during the freshman year.

Procedure
The initial survey (phase 1) was included in the packet of informational material distributed to all freshman students during their first week on campus. Students deposited their completed surveys into boxes in their dormitories. Subjects were asked to use their parents’ birthdates (month and day of mother first and father second) as an identification code. This allowed matching of questionnaires from the two phases of data collection while assuring anonymity. At follow-up, (phase 2) all freshman students received a copy of the follow-up survey in their campus mailbox 4 weeks prior to final exam week at the end of the school year. Students received $5.00 for returning their surveys to the research staff who had temporarily set up a table near the students’ mailboxes.

RESULTS
Changes in the Prevalence of Disordered Eating
First, we sought to identify the prevalence of disordered eating and how it changed over time. Prevalence data on the syndrome of bulimia nervosa are reported first, followed by data on behavioral symptoms or disordered eating.

Individuals with a Suspected Diagnosis of Bulimia Nervosa
We recognize the inherent limitations of diagnosing subjects based on self-report questionnaire data. However, the questionnaire methodology did permit us to identify subjects whose answers to the questions about bulimic symptoms suggested the presence of bulimia nervosa as defined by DSM-III-R.*

At baseline, 17 females and one male met all criteria for bulimia nervosa based

*The DSM-III-R was not yet published when we devised our survey. Our frequency categories for binge eating included “once a week” and “three times a week” but not the current diagnostic criteria of twice weekly. We have therefore utilized the cut-off score of binge eating three times per week for inclusion into the diagnostic category in order to err in the more conservative direction.
on their responses to the questionnaire and represent probable cases. This represents less than 0.2% of the male subjects and 3.8% of the female subjects.

Using the entire group of respondents to the follow-up questionnaire, we found an almost identical number of "probable" cases of bulimia nervosa at the conclusion of the freshman year \((n = 17; \text{all females})\) as we had at the outset \((n = 18; 17 \text{ females, 1 male})\). Of the 18 probable cases in the fall, two (one female and one male) did not participate in the spring. Eleven females still met the criteria for bulimia nervosa at the conclusion of the year. Five females no longer qualified for a diagnosis at follow-up: although they still reported symptomatic behavior (i.e., binge eating, restrictive dieting, and, in two cases, purging), the frequency of these behaviors was no longer high enough to meet the inclusion criteria.

Three female subjects were classified as bulimic at the end of the academic year who had not qualified for the diagnosis in the fall owing to insufficient frequency of binging and purging behaviors at the initial assessment. An additional three female subjects who were classified bulimic in the second questionnaire assessment had not participated in the first study.

An examination of only those subjects who completed both surveys revealed three new cases of bulimia nervosa at the end of the freshman year. All three students had been symptomatic at a subclinical level at the initial assessment. On the other hand, five subjects reduced their symptomatic behaviors enough to no longer meet the inclusion criteria for a clinical diagnosis. Consideration of the data from both surveys suggests that the results are not the result of the potential problem that students who experienced difficulties regarding food and eating were more likely to drop out from our survey. Only one of the probable cases identified in the first phase of data collection did not participate in the second phase.

**Changes in Disordered Eating Symptoms During the Freshman Year**

Analyses of baseline data found that females (64.5%) were significantly more likely than males (19.4%) to report that they had "ever been on a weight loss diet" prior to college \((\chi^2(1) = 219.16, p < .0001)\). Significantly more women (43.4%) than men (17.0%) had a history of binge eating \((\chi^2(1) = 87.9, p < .0001)\). Finally, more females (12.2%) than males (2%) indicated that they had ever used purging to control their weight \((\chi^2(1) = 43.50, p < .0001)\).

Our next set of analyses examined whether the college experience promoted the development of the behaviors of dieting, binge eating, and purging. To do so, we asked whether it was equally likely that a student who reported no symptoms at baseline would report symptoms at follow-up as it was that a student who was symptomatic at baseline would report being symptom-free at follow-up. Furthermore, we examined gender differences in changes in symptomatic eating behaviors during the freshman year.

McNemar chi-square statistics were calculated separately for each gender for each of the eating behavior variables (i.e., dieting, binge eating, and purging). The McNemar chi-square statistic is used when the same subjects are categorized at two time points. The statistic is calculated using only those subjects who report a change in symptomatology. The frequencies are presented in Table 1.
Table 1. Numbers of subjects showing changes in symptoms of disordered eating behavior.

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th></th>
<th>Males</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No dieting</td>
<td>Dieting</td>
<td>No dieting</td>
<td>Dieting</td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No dieting</td>
<td>43 (13.1%)</td>
<td>75 (22.9%)</td>
<td>182 (53.7%)</td>
<td>80 (25.4%)</td>
</tr>
<tr>
<td>Dieting</td>
<td>22 (6.7%)</td>
<td>188 (57.3%)</td>
<td>20 (5.9%)</td>
<td>51 (15.0%)</td>
</tr>
<tr>
<td></td>
<td>No binge eating</td>
<td>Binge eating</td>
<td>No binge eating</td>
<td>Binge eating</td>
</tr>
<tr>
<td>No binge eating</td>
<td>143 (43.5%)</td>
<td>48 (14.6%)</td>
<td>254 (74.9%)</td>
<td>35 (10.3%)</td>
</tr>
<tr>
<td>Binge eating</td>
<td>29 (8.8%)</td>
<td>109 (33.1%)</td>
<td>28 (8.3%)</td>
<td>22 (6.5%)</td>
</tr>
<tr>
<td></td>
<td>No purging</td>
<td>Purging</td>
<td>No purging</td>
<td>Purging</td>
</tr>
<tr>
<td>No purging</td>
<td>279 (85.6%)</td>
<td>13 (4.0%)</td>
<td>325 (96.7%)</td>
<td>4 (1.2%)</td>
</tr>
<tr>
<td>Purging</td>
<td>6 (1.8%)</td>
<td>28 (8.6%)</td>
<td>6 (1.8%)</td>
<td>1 (0.3%)</td>
</tr>
</tbody>
</table>

It was significantly more likely for females who had no history of dieting at the beginning of the freshman year to report dieting at the end of the year than for females who reported dieting at the beginning of the year to report that they had stopped dieting at the end of the freshman year ($\chi^2(1) = 27.88, p < .001$). Similarly, it was significantly more likely for nondieting males at the beginning of the year to report dieting by the end of the year than for males who were dieting initially to report that they were no longer dieting ($\chi^2(1) = 39.86, p < .001$).

Women who did not binge at the start of the year were significantly more likely to report binge eating by the end of the school year than were women who reported binge eating at phase 1 to no longer report binge eating at phase 2 ($\chi^2(1) = 4.21, p < .05$). In contrast, a similar number of men switched from symptom-free to symptomatic binge eating as switched from symptomatic to symptom-free binge eating ($\chi^2(1) = .57, NS$).

The incidence of purging for both females and males at each time point was so low that calculation of significance was deemed inappropriate.

**Factors Associated with Symptom Worsening**

The preceding analysis asked only about a shift from never engaging in dieting, binging, or purging prior to college to engaging in these behaviors at any level during the freshman year. Next we considered severity, asking what factors were related to a worsening of disordered eating symptoms over the course of the freshman year in students who had already engaged in these behaviors prior to college. Because of the low incidence of disordered eating among the male students, we assessed this issue among females only. Based on their DESS scores, female subjects were assigned to one of three groups. Subjects who reported symptoms of similar severity at both surveys (within a
range of ±1.5 points) were labelled the “no change group”; subjects who reported an increase in symptom severity at phase 2 of at least one standard deviation (SD = 4.02) above their initial DESS score were labelled the “worsened group.” These two groups were compared with one another and to a third group, the “symptom-free group,” who obtained a DESS score of virtually zero on both surveys (from zero to 1.5 points). DESS scores of the three groups are displayed in Table 2.

First, a univariate analysis of variance was performed to compare the three groups’ initial DESS scores. This comparison was calculated to make certain that the two symptomatic groups did not differ in severity of symptomatology at the first phase of data collection. A significant group difference was found \(F(2,175) = 32.24, p < .0001\). Student-Neuman-Keuls tests found that the two symptomatic groups obtained significantly higher DESS scores than the symptom-free subjects. Importantly, the DESS scores of the two symptomatic groups did not differ significantly from each other.

The next set of analyses was aimed at identifying variables that differentiated those symptomatic students whose symptoms worsened during the freshman year from those symptomatic students whose symptoms remained largely unchanged or those who were initially symptom-free. Means for the variables used in these analyses are contained in Table 3.

First, a MANOVA was calculated in which the dependent variables were change scores of variables assessed at both phases: Body Weight, Feelings about Weight, Weight Dissatisfaction, Perceived Attractiveness, Ineffectiveness, and Perfectionism. Furthermore, the variables Competitiveness and Unconcern (measured only at baseline) and the Perceived Stress Scale scores (obtained only at follow-up) were entered as dependent variables. A significant main effect of group was obtained (Wilks’ Lambda = 0.72, \(F(2,135) = 2.49, p < .001\)). The contrast comparing the worsened group with the symptomatic and the symptom-free groups was significant \(F(1,135) = 3.11, p < .002\). The residual was not significant \(p > .10\). Hence, the overall group difference was due to the significant differences between the worsened subjects and the remaining subjects.

A subsequent discriminant analysis was performed to specify which variables contributed most to the group differences. This analysis, separating the worsened group from the other two groups, yielded an eigenvalue of 0.24 with a resulting canonical correlation of 0.44. The structure coefficients obtained for the variables (in decreasing order) were changes in Feelings about Weight, .77; changes in Perceived Attractiveness, .54; changes in Body Weight, .48; Perceived Stress, .45; changes in Weight Dissatisfaction, .43; changes in Ineffec-

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| Table 2. Disordered eating symptoms scale scores of the three groups of females. |
|------------------------------------------|----------|----------|----------|----------|
| Group                     | Baseline |          | Follow-up |          |
|                          | M        | SD       | M        | SD       |
| Symptom-free (n = 49)    | 0.08     | (0.27)   | 0.27     | (0.40)   |
| No change (n = 78)       | 6.13     | (4.67)   | 6.16     | (4.76)   |
| Worsened (n = 51)        | 4.99     | (5.38)   | 11.94    | (5.81)   |
Table 3. Comparison of symptom-free, no change, and worsened groups on variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Symptom-free (n = 49)</th>
<th>No change (n = 78)</th>
<th>Worsened (n = 51)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent overweight 1</td>
<td>-8.0ᵃ (7.97)</td>
<td>1.30ᵇ (12.37)</td>
<td>-3.53ᵇ (8.64)</td>
</tr>
<tr>
<td>Percent overweight 2</td>
<td>-6.16ᵃ (8.85)</td>
<td>3.01ᵇ (9.75)</td>
<td>-1.60ᵇ (8.63)</td>
</tr>
<tr>
<td>Feelings about weight 1</td>
<td>9.13ᵃ (2.86)</td>
<td>15.81ᵇ (6.64)</td>
<td>12.68ᵇ (6.24)</td>
</tr>
<tr>
<td>Weight discrepancy 1</td>
<td>10.64ᵃ (2.45)</td>
<td>14.96ᵇ (5.03)</td>
<td>15.58ᵇ (5.09)</td>
</tr>
<tr>
<td>Weight discrepancy 2</td>
<td>4.12ᵃ (4.22)</td>
<td>10.26ᵇ (9.55)</td>
<td>6.92ᵃ (6.74)</td>
</tr>
<tr>
<td>Attractiveness 1</td>
<td>3.29 (0.98)</td>
<td>3.57 (1.12)</td>
<td>3.47 (1.08)</td>
</tr>
<tr>
<td>Attractiveness 2</td>
<td>3.14 (1.00)</td>
<td>3.60 (1.07)</td>
<td>3.18 (1.16)</td>
</tr>
<tr>
<td>Ineffectiveness 1</td>
<td>1.00 (1.70)</td>
<td>2.01 (3.40)</td>
<td>1.41 (2.80)</td>
</tr>
<tr>
<td>Ineffectiveness 2</td>
<td>1.02ᵃ (1.83)</td>
<td>2.51ᵇ (3.41)</td>
<td>3.02ᵇ (5.19)</td>
</tr>
<tr>
<td>Perfectionism 1</td>
<td>6.26 (4.12)</td>
<td>6.91 (3.62)</td>
<td>6.74 (4.50)</td>
</tr>
<tr>
<td>Perfectionism 2</td>
<td>6.02 (4.54)</td>
<td>7.19 (4.37)</td>
<td>6.73 (4.15)</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>11.06 (4.05)</td>
<td>12.65 (3.21)</td>
<td>11.47 (4.23)</td>
</tr>
<tr>
<td>Unconcern</td>
<td>9.10 (3.40)</td>
<td>9.13 (2.93)</td>
<td>9.16 (3.19)</td>
</tr>
<tr>
<td>PSS</td>
<td>22.39ᵃ (6.59)</td>
<td>26.55ᵇ (7.18)</td>
<td>27.30ᵇ (8.75)</td>
</tr>
</tbody>
</table>

Note: Means marked by different superscript letters differ significantly (p < .05).

tiveness, .36. Importantly, although the structure coefficient for changes in Body Weight was significant, the groups did not differ in the mean amount of weight gained. It is possible that the sizable structure coefficient was the result of highly different standard deviations among the groups on this variable. Competitiveness (.04), Unconcern (.04), and changes in Perfectionism (−.11) scores were not correlated with the discriminant function and thus did not contribute to a differentiation of the subjects whose symptoms worsened from the other two groups.

**DISCUSSION**

The data in the present study did not show an alarming prevalence rate of bulimia nervosa in the incoming freshman class of an elite private university, a reputed environment for the "eating disorders epidemic." Less than 0.2% of males and 3.8% of females met the DSM-III-R criteria for probable diagnosis of bulimia nervosa based on the questionnaire assessment. A concern might be raised about the limitations of the questionnaire methodology in detecting all cases. However, when the self-report survey method of identifying bulimia nervosa has been validated by the use of clinical interviews, a slight tendency toward false positives has been found (Schotte & Stunkard, 1988). This suggests that our data probably err in the direction of indicating the rate of bulimia nervosa to be higher rather than lower than actual. Our prevalence figures are
comparable to those found by other researchers who have used similar criteria (see Connors & Johnson, 1987).

The prospective design of the study constitutes one of the first research attempts to examine changes in disordered eating over time. Surprisingly, we found no more individuals moving into the clinically disordered range of bulimia nervosa over the course of the freshman year than moving out of it. These results would seem to dispel some of the worst fears that college is a “breeding ground” (Squire, 1983) for bulimia nervosa. Future prospective research, however, should follow students as they progress through college beyond the first year to explore more fully the impact of college on the development of eating disorders.

Although very few students developed bulimia nervosa, a significant number experienced an increase in one or more symptoms of disordered eating during their first year in college. Overall, disordered eating symptoms were exacerbated more than ameliorated over the course of the freshman year. About one-fourth of the class put themselves on a diet for the first time during the year. Both females and males were more likely to experience the onset of dieting behavior during their freshman year than they were to cease dieting if they had previously dieted. For females, a similar pattern obtained for binge eating, with approximately 15% of the women beginning to binge eat for the first time during their freshman year.

A central goal of this study was to identify factors that may relate to worsening of disordered eating symptoms over the course of the freshman year. Our analyses provided suggestive results. High perceived stress, an increased sense of ineffectiveness, and an increase in negative feelings about weight were associated with a worsening of disordered eating symptoms during the freshman year. Several possible linkages among these factors seem plausible. Women who subjectively experienced their freshman year as more stressful than their peers may have felt a greater increase in their general sense of ineffectiveness. Although these women gained no more weight than their peers, their increased sense of ineffectiveness may have generalized to their weight, contributing to their more negative emotions about weight. In an effort to control their weight and to improve their feelings about how much they weighed, they subsequently may have engaged in an increased level of dieting. Evidence suggests that dieting is a risk factor for binging (Polivy & Herman, 1985), so that once a student embarked on increasingly frequent dieting attempts, she increased her risk of engaging in binge eating as well.

Alternatively, one could posit that the higher scores on the Perceived Stress Scale were a result rather than a cause of the increase in disordered eating. Similarly, it is possible that women who experienced an increase in disordered eating subsequently felt worse about the weight that they gained during the year and felt more ineffective relative to women whose eating behaviors did not worsen. Knowing that they had been dieting and binging, the former group may have felt more responsible for and dysphoric about their weight gain than the latter group, and their inability to control their weight by their dieting efforts may have contributed to their greater sense of ineffectiveness. These results suggest that the relationship of perceived stress to disordered
eating deserves further study. In addition the study underscores the role of ineffectiveness in the development of disordered eating, and factors that contribute to an increased sense of ineffectiveness merit further consideration.

REFERENCES


