Little previous research has compared bulimics to dieters who do not binge eat but who are also concerned with their weight. This study examined differences between college students who were classified as either bulimic (N=21), chronic dieters (N=29), or controls (N=83). The extent to which remarks made by significant others and failure experiences affect how subjects feel about their bodies was examined as was the frequency of social comparisons regarding weight, self-esteem, and perceptions of the extent to which their parents consider various factors important for success. Both bulimics and dieters reported a significantly greater tendency for weight-related remarks and failure experiences to influence the way they felt about their bodies than did control subjects. Bulimics scored significantly higher than controls or dieters on self-esteem and the tendency to make social comparisons regarding weight; dieters scored significantly higher than controls on these measures. Compared to fathers of dieters or controls, fathers of bulimics placed significantly greater importance on good athletic performance, popularity among female peers, and thinness in viewing their daughters as successful. Both bulimics and dieters scored significantly higher than controls in terms of the extent to which their mothers considered good athletic performance important in viewing their daughters as successful. (Author/ABL)
INFLUENCE ON AND SEVERITY OF WEIGHT CONCERN:

BULIMICS, DIETERS, AND CONTROLS

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A great deal of empirical work has been devoted to the comparison of bulimics and control subjects. Several researchers have found increased psychopathology (Weiss & Ebert, 1983; Williamson, Kelley, Davis, Ruggiero, & Blouin, 1985), lower self-esteem (Katzman & Wolchik, 1984) and increased impulsive behavior (Weiss & Ebert, 1983) among bulimics relative to controls. Bulimics also evidence greater body size distortion (Willmuth, Leitenberg, Rosen, Fondacaro, & Gross, 1985) and greater concerns about their weight than do controls (Pyle, Mitchell, & Eckert, 1981). In addition, differences have been found between the perceived family environments of bulimics and nonbulimics (Johnson & Flach, 1985; Ordman & Kirschenbaum, 1986). However, very little work has compared bulimics to dieters who do not binge eat but who are also concerned with their weight (e.g., Dykeas & Gerrard, 1986). The purpose of the present study was to examine differences between bulimic, dieter, and control subjects on the following of personal and familial dimensions: the extent to which remarks made by significant others and failure experiences affect how they feel about their bodies, the frequency of social comparisons regarding weight, self-esteem, and perceptions of the extent to which their parents consider various factors important for success.

Both bulimics and dieters reported a significantly greater tendency for weight-related remarks and failure experiences to influence the way they feel about their bodies than control subjects. In terms of self-esteem and the tendency to make social comparisons regarding weight, bulimics scored significantly higher on both these measures than dieters or controls, while dieters obtained significantly higher scores than controls on these measures. Additionally, fathers of bulimics placed significantly greater importance than fathers of dieters or controls on good athletic performance, popularity among female peers, and thinness in viewing their daughters as successful. Finally, both bulimics and dieters scored significantly higher than controls in terms of the extent to which their mothers considered good athletic performance important in viewing their daughters as successful. Results are used in terms of the etiology and treatment of bulimia.
INTRODUCTION

Recently, several authors have implicated extreme concern with weight and desire for thinness (Boskind-Lodahl, 1976; Fairburn & Garner, 1986; Hawkins & Clement, 1984; Russell, 1985) as well as particular parental attitudes (Boskind-Lodahl, 1976; Mizes, 1985) in the etiology and/or maintenance of bulimia. Research has demonstrated that bulimics evidence greater body image distortion (Williamson et al., 1985; Willmuth et al., 1985), have a poorer attitude toward their bodies (Katzman & Wolchik, 1984), and desire to be significantly thinner (Williamson et al., 1985) than do controls. Regarding parental characteristics, Johnson and Flach (1985) found higher achievement orientation among bulimic families compared to control families. Relatedly, Sights and Richards (1984) found that the parents of bulimics placed increased demands on and held significant higher expectations for their daughters than parents of control subjects. Yet despite documented differences on these etiological/maintenance variables between bulimics and controls, little research has examined differences between bulimics and chronic dieters who also exhibit weight concern but for whom this concern has not developed into a health-threatening behavior pattern. The purpose of the present study was to compare bulimics, dieters, and controls on: 1) variables related to concern with weight and shape and 2) the extent to which parents are perceived as considering various factors important in evaluating their daughters as successful. Given that weight concern is a feature common to both bulimics and dieters, the comparison of these two groups is important in identifying characteristics which are specific to bulimia vs. those which are more general, therefore increasing our understanding of the etiology, maintenance, and treatment of bulimia.
METHOD

Subjects.

Twenty-one bulimics, 29 chronic dieters, and 83 control subjects participated in this study. All subjects were recruited from undergraduate psychology classes and were recruited from two sources, Arizona State University and local community colleges. Participation was voluntary, although ASU subjects received research credit for their participation. Bulimic subjects met the DSM III criteria for bulimia, reported binge eating at least once a week for the past three months, and reported using one or more forms of purging (via self-induced vomiting, restrictive dieting, laxatives, diuretics, or exercise) during the past month. The dieter group consisted of subjects who reported dieting continuously over the past two months, who reported being on at least one other diet prior to the past year, and who had not engaged in binge eating or self-induced vomiting during the past six months. Control subjects reported not having engaged in binge eating, self-induced vomiting, or dieting during the past six months and had a maximum of one previous dieting attempt (excluding the past year).

Measures.

The influence of weight-related remarks made by significant others on feelings about one’s body was assessed by a three-item scale, "Weight-related Remarks" (alpha=.85). The extent to which failure experiences affect feelings about one’s body was assessed by a three-item scale, "Failure" (alpha=.82). Self-esteem was assessed by the Rosenberg Self-Esteem Index (Rosenberg, 1979). Test reliability for this 10-item measure is reported to be .85 (Silber & Tippett, 1965). A four-item scale was used to assess the tendency to compare one’s weight and body to those of other women ("Comparison"; alpha=.87). Finally, 13 items were used to assess subjects’ perceptions of the extent to which each of their parents considers various factors (e.g., earning a good salary, being thin) as important in viewing their daughter as successful.
RESULTS

Data were analyzed using three separate multivariate analysis of variance (MANOVA) procedures, one each for: 1) scores on the "Weight-Related Remarks," "Failure," "Comparison," and Self-Esteem measure 2) the 13 items concerning mother’s view of factors considered important for success 3) the 13 items concerning father’s view of factors considered important for success.

The first MANOVA revealed a significant overall effect for group ($F_{10, 248} = 6.64, p<.000$). Subsequent univariate analyses indicated significant effects for scores on the Weight-Related Remarks ($F_{2, 129} = 6.32, p<.002$), Failure ($F_{2, 129} = 11.13, p<.000$), Comparison ($F_{2, 129} = 14.20, p<.000$), and Self-Esteem ($F_{2, 129} = 9.05, p<.000$) measures. Post hoc comparisons using the Neuman-Kuels procedure revealed that both bulimics and dieters evidenced a significantly greater propensity than controls for weight-related remarks made by significant others to influence the way they feel about their bodies. No significant differences were found between bulimics and dieters on this measure. Similarly, bulimics and dieters reported that failure experiences influenced the way they felt about their bodies to a significantly greater degree than did control subjects. Again, bulimics and dieters did not differ significantly on this measure. In addition, bulimics were significantly more likely to compare their bodies to those of other women than dieter or control subjects, while dieters reported engaging in body comparisons significantly more often than controls. Finally, bulimics evidenced significantly lower self-esteem than dieters or controls. No significant differences were found between dieters and controls in terms of self-esteem.

The second MANOVA examined the importance placed by mother on 13 different factors in viewing subjects as successful. The multivariate analysis failed to reach significance ($F_{26, 230} = 1.29, p<.17$), and only one of the 13 variables, "good athletic performance," was significant at the univariate level ($F_{2, 131} = 3.65, p<.03$). Post hoc comparisons revealed relative to controls, bulimics and dieters reported that their mothers
considered good athletic performance more important in order to view them as successful. No significant differences were found between bulimics and dieters on this item.

The third MANOVA examined the importance placed by father on the same 13 items examined in the preceding analysis. Although the multivariate analysis failed to reach significance ($F_{(26, 236)} = 1.38, p<.11$), three of these items were significant at the univariate level, "good athletic performance" ($F_{(2, 128)} = 3.84, p<.02$), "popularity among female peers" ($F_{(2, 128)} = 3.48, p<.03$), and "being thin" ($F_{(2, 128)} = 5.84, p<.004$). Post hoc comparisons indicated that bulimics reported that their fathers placed significantly greater importance on good athletic performance, popularity among female peers, and being thin in order to consider them successful compared to control subjects. No significant differences emerged between bulimics and dieters nor between dieters and controls on these items.
DISCUSSION

The results suggest that similarities as well as differences exist between bulimics and chronic dieters. These two groups appear similar in terms of weight- and body-related issues. Bulimics and dieters were similar with regard to the extent to which weight-related remarks and failure experiences influence the way they feel about their bodies. These findings support previous suggestions that women who feel fat hold a self-schemata in which body weight is central (Markus et al., 1984; Streigel-Moore, McAvay, Rodin, 1986). Bulimics and dieters appear to process self-relevant information with their weight in mind, such that an experience leading to self-evaluation in general may also lead to evaluation of one's body and weight. Treatment of bulimics and chronic dieters should address this strong cognitive schema for weight and attempt to reduce the relative importance of body weight and shape as an evaluative dimension of the self. While both bulimics and dieters reported making social comparisons regarding weight more frequently than controls who did not exhibit weight concern, bulimics reported doing so more frequently than dieters. This provides support for Boskind-Lodahl's (1976) hypothesis that bulimics lack an internally-held sense of self and strive for external validation through trying to meet the demands and standards of others.

Notable differences were observed between bulimics and dieters in areas other than those concerning weight. Bulimics evidenced significantly lower self-esteem than either dieters or controls. This finding supports previous work reporting increased psychopathology among bulimics relative to dieters (Dykens & Gerrard, 1986). This area deserves further investigation, although given that both bulimics and dieters exhibit weight concern, one may hypothesize that the increased presence of personality deficits such as low self-esteem (or more severe psychopathology) among bulimics may interact with weight concern to influence the expression of bulimia.

Finally, relative to fathers of dieters and controls, fathers of bulimics evidently place greater importance on good athletic performance, popularity, etc.?
among female peers, and being thin in considering their daughters "successful." This finding highlights the hypothesized importance of paternal influence in bulimia (Boskind-Lodahl, 1976), and suggests that fathers may foster increased achievement strivings across multiple dimensions in which the standards for success are externally determined. That bulimics perceived their fathers to place greater emphasis on being thin suggests that the importance placed by bulimics on weight and shape may be fostered to some extent within the family environment. These findings suggest the importance of addressing family attitudes in the treatment of bulimia.
REFERENCES


Table I


<table>
<thead>
<tr>
<th>Measure</th>
<th>Bulimics (N=21)</th>
<th>Dieters (N=29)</th>
<th>Controls (N=83)</th>
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<tr>
<td>Influence of Weight-Related Remarks</td>
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<td></td>
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<tr>
<td>on feelings about one's body</td>
<td>3.54</td>
<td>3.67</td>
<td>3.03</td>
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<td>Social Comparison regarding weight</td>
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<td>b</td>
</tr>
<tr>
<td></td>
<td>3.77</td>
<td>3.27</td>
<td>2.67</td>
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<tr>
<td>Influence of Failure experiences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on feelings about one's body</td>
<td>a</td>
<td>a</td>
<td>b</td>
</tr>
<tr>
<td></td>
<td>3.12</td>
<td>2.94</td>
<td>2.21</td>
</tr>
<tr>
<td>Self-Esteem</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.47</td>
<td>3.12</td>
<td>3.16</td>
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Note. Means with common superscripts do not differ significantly at the p<.05 level.
Table 2

Results of Newman-Kuels Post Hoc Tests for Subjects' Perceptions of Their Parents' Views of Success Among Bulimic, Dieter, and Control Subjects.

<table>
<thead>
<tr>
<th>Measure (viewed by parent as important for success)</th>
<th>Group</th>
<th>Bulimic (N=21)</th>
<th>Dieter (N=29)</th>
<th>Control (N=83)</th>
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</thead>
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<tr>
<td>Importance placed by Mother on Athletic Performance</td>
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<td>2.48 (a)</td>
<td>2.42 (a)</td>
<td>1.86 (b)</td>
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<td>Importance placed by Father on Athletic Performance</td>
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<td>3.29 (a)</td>
<td>2.55 (b)</td>
<td>2.29 (b)</td>
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<tr>
<td>Importance placed by Father on Popularity Among Female Peers</td>
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<td>2.91 (a)</td>
<td>2.62 (b)</td>
<td>2.21 (b)</td>
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<tr>
<td>Importance placed by Father on Being</td>
<td></td>
<td>2.95 (a)</td>
<td>2.41 (b)</td>
<td>1.94 (b)</td>
</tr>
</tbody>
</table>

*Note: Values with common superscripts do not differ significantly at the p<.05 level.*