Personality Features Differentiate Late Adolescent Females and Males with Chronic Bulimic Symptoms

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Abstract: Objective: The authors examined gender differences in bulimia-related personality variables among late adolescents with chronic bulimic symptoms. Method: Ninety-seven females and 14 males were included in the study. They participated in surveys in 1982, and again in 1992, and at each session reported elevated bulimic symptoms. Each respondent completed subscales of the Eating Disorders Inventory (Bulimia, Drive for Thinness, Perfectionism, and Interpersonal Distrust). Results: Even compared to males with similar levels of chronic bulimic symptoms, females with chronic bulimic symptoms reported more drive for thinness; compared to females with chronic bulimic symptoms, males with chronic bulimic symptoms reported more perfectionism and interpersonal distrust. Discussion: Late adolescent males and females with chronic bulimic symptoms can be distinguished on the basis of personality features. These findings have implications for theory, as well as for clinical assessment and therapeutics. © 2000 by John Wiley & Sons, Inc. Int J Eat Disord 27: 191–197, 2000.

Key words: perfectionism; distrust; drive for thinness; chronic bulimic symptoms

INTRODUCTION

Bulimia nervosa is not rare among males. Males account for 10–15% of all bulimic patients (Carlat & Camargo, 1991). Accordingly, characterization of bulimia in males is important, for both clinical and theoretical reasons. As Carlat, Camargo, and Herzog (1997) argued, clinical description of male bulimia may guide diagnostic and treatment decision-making; from a theoretical standpoint, gender differences in bulimic presentation may point to different pathogenesis for males and females. To elucidate bulimic

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features that differ between males and females, studies that directly compare the clinical profiles of bulimic males and females are needed.

Only a few such studies have been reported. In general, these studies detect many similarities between bulimic males and females and relatively few differences. For example, Olivardia, Pope, Mangweth, and Hudson (1995), in a comparison of 33 women and 25 men with eating pathology, reported no gender differences with regard to age of onset, frequency of binge eating, rate of comorbid psychiatric disorder, or body image dissatisfaction. Regarding differences between bulimic men and women, Herzog, Norman, Gordon, and Pepose (1984) found that eating-disordered men were more likely than their female counterparts to report homosexual status, as well as sexual inactivity and isolation. The finding that bulimic men are particularly likely to report homosexual status has been well replicated (e.g., Carlat et al., 1997; Schneider & Agras, 1987), although there is at least one dissenting report (Olivardia et al., 1995). In a study of 15 bulimic men and 15 bulimic women matched on demographic and clinical indices, Schneider and Agras (1987) reported that the men used less weight controls, perceived ideal weight more realistically, and reported higher current and past weight (Carlat et al., 1997, obtained a similar result). There is some indication that bulimic men may experience more relationship problems than women: Schneider and Agras (1987) and Herzog et al. (1984) found that bulimic men were less likely to be in romantic relationships than bulimic women; and Olivardia et al. (1995) reported that bulimic men may have experienced more episodes of early abuse than bulimic women.

Apart from differences in homosexual status, then, differences between bulimic males and females appear to emerge in two areas. First, bulimic females appear to be more concerned with ideal weight and with weight control than bulimic males. Second, bulimic males may experience more relationship difficulties than bulimic females, perhaps as a function of interpersonal isolation and rigidity (e.g., Herzog et al., 1984).

This study extends or adds to current knowledge on gender differences in bulimia, using a nonclinical sample of late adolescent males and females ($N = 111$) who reported high levels of bulimic symptomatology at two sessions, 10 years apart. Because participants were late adolescents at the first session and young adults at the second, the present study afforded a valuable opportunity not only to directly compare males and females with bulimic symptoms, but also to study chronic bulimic symptoms affecting substantial portions of participants’ lives. Consistent with past research showing that bulimic women may be more concerned about ideal weight and weight control than bulimic men, it was hypothesized that females with chronic bulimic symptoms would report more Drive for Thinness than males with chronic bulimic symptoms. Second, in light of research on interpersonal problems of bulimic men (Herzog et al., 1984), as well as on the negative interpersonal consequences of perfectionism (Blatt, Quinlan, Pilkonis, & Shea, 1995), it was predicted that males with chronic bulimic symptoms would report more Perfectionism and Interpersonal Distrust, even as compared to females with chronic bulimic symptoms. Personality differences on Drive for Thinness, Perfectionism, and Interpersonal Distrust would inform clinical decision-making, as well as guide future research on differential risk for bulimic symptoms among males and females.

METHOD

Participants and Procedure

In the spring of 1982, researchers affiliated with Radcliffe College distributed surveys to a randomly selected sample of late adolescents (800 females, 400 males) who were stu-
dent's students at Harvard University. These students were followed up 10 years later by Heatherton, Nichols, Mahamedi, and Keel (1995). The focus of the present study is on the 14 males and 97 females who (1) agreed to participate in 1982 and in 1992; (2) had complete data on all relevant measures at both the 1982 and 1992 assessments (221 males and 532 females); and (3) obtained an elevated score on a measure of bulimic symptoms in both 1982 and 1992. These participants were predominantly Caucasian (79%); approximately 9% were Asian; 6% were African-American; 4% were Hispanic; and 2% were classified as other. Their mean age in 1982 was 19.9 years (SD = 2.5).

The questionnaire administered in 1982 and 1992 included an array of items about demographic background, height and weight, concerns about dieting, eating patterns, body weight and shape, and eating disorder symptomatology. Of particular interest for the present study, participants completed the Bulimia, Drive for Thinness, Perfectionism, and Interpersonal Distrust subscales of the Eating Disorders Inventory (EDI).

The EDI

The EDI (Garner, Olmstead, & Polivy, 1983) is a frequently used 64-item self-report measure of eating-related attitudes and traits. It yields eight subscales: Drive for Thinness, Bulimia, Body Dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal Distrust, Interoceptive Awareness, and Maturity Fears. The subscales have shown adequate internal consistency coefficients and have been well validated (Garner et al., 1983).

The present study focused on the Bulimia, Drive for Thinness, Perfectionism, and Interpersonal Distrust subscales, in accord with the study’s hypotheses. Within each of the four subscales examined in the present study, selected items were excluded by the researchers who designed the 1982 questionnaire packet, in order to reduce demands on participants. Only redundant items were selected for exclusion. Six of the seven original items of the Bulimia subscale, which assesses binging and purging (e.g., “I stuff myself with food,” “I have the thought of trying to vomit to lose weight”), were included (excluded item: “I eat or drink in secrecy”). Five of the seven original items of the Drive for Thinness subscale were included (e.g., “I am terrified of gaining weight,” “I am preoccupied with the desire to be thinner,” excluded items: “I eat sweets and carbohydrates without feeling nervous” and “I exaggerate or magnify the importance of gaining weight”). All six items of the Perfectionism subscale, designed to measure general perfectionism (“I feel that I must do things perfectly, or not do them at all,” “Only outstanding performance is good enough in my family”), were included. Five of the original seven items of the Interpersonal Distrust subscale were included (e.g., “I can communicate with others easily” [reversed], “I have trouble expressing my emotions to others,” excluded items: “I trust others” [reversed], “I am open about my feelings” [reversed]). Participants were asked to rate items on a 1 to 6 scale (1 = never; 2 = rarely; 3 = sometimes; 4 = frequently; 5 = usually; 6 = always).

EDI Bulimia scale cut-off scores were selected so that approximately 15% of the females were included, and so that 5 to 10 times more females than males were included. The figure of 15% was selected to target a spectrum of chronic bulimic symptoms, ranging from moderate to severe intensity. The female-to-male ratio of 5–10:1 was selected to mirror the ratio of prevalence rates in unselected populations (Carlat & Camargo, 1991). Scores of 13 at both the 1982 and 1992 sessions on the present version of the EDI Bulimia subscale approximately accomplished the desired figures (i.e., 97 of 532 females = 18%; ratio of 97 females to 14 males = 6.9:1). Findings did not differ if somewhat more or less stringent cut-off criteria were used.
It is reiterated that males and females who were selected for the present study should not be viewed as having received a diagnosis of bulimia nervosa established through structured clinical interview. Rather, this is a study of a range of chronic bulimic symptoms, from moderate to severe. Findings should be interpreted accordingly.

RESULTS

Consistent with prediction, Drive for Thinness was correlated with gender, such that females with chronic bulimic symptoms tended to obtain higher Drive for Thinness scores than males with chronic bulimic symptoms ($r = .29$, $p < .01$, $N = 111$). Also consistent with prediction, Interpersonal Distrust scores were correlated with gender, such that males with chronic bulimic symptoms tended to obtain higher Interpersonal Distrust scores than females with chronic bulimic symptoms ($r = -.18$, $p = .06$, $N = 111$). At odds with prediction, Perfectionism scores were uncorrelated with gender ($r = -.06$, $p = ns$, $N = 111$; but see below).

Unique Associations of Drive for Thinness, Perfectionism, and Interpersonal Distrust with Gender

Insofar as Drive for Thinness, Perfectionism, and Interpersonal Distrust are substantially intercorrelated, a clearer picture of each variable’s association with gender will emerge when relations between each EDI subscale and gender, controlling for the other EDI subscales, are examined. The predicted and significant relation between gender and Drive for Thinness remained, even controlling for the other subscales. The relations between both Interpersonal Distrust and Perfectionism, on the one hand, and gender, on the other hand, were enhanced by covariation of the other EDI subscales. Table 1 shows a regression equation with gender as the dependent variable (see Cohen & Cohen, 1983, for use of multiple regression/correlation with dichotomous dependent variables) and EDI Drive for Thinness, Perfectionism, and Interpersonal Distrust as predictors. Table 1 reveals that Drive for Thinness ($pr = .34$, $t \{107\} = 3.78$, $p < .01$), Perfectionism ($pr = -.20$, $t \{107\} = -1.97$, $p < .05$), and Interpersonal Distrust ($pr = -.21$, $t \{107\} = -2.18$, $p < .05$) were associated with gender, in predicted directions, when controlling for the other two EDI subscales.

It is possible that the female participants experienced more severe bulimic symptoms

Table 1. EDI Drive for Thinness, Perfectionism, and Interpersonal Distrust predicting gender

<table>
<thead>
<tr>
<th>Order of Entry</th>
<th>Predictors in Set</th>
<th>$F$ for Set</th>
<th>$t$ for within-Set Predictors</th>
<th>$df$</th>
<th>Partial Correlation ($PR/pr$)</th>
<th>Model $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Set</td>
<td>EDI Drive for Thinness</td>
<td>6.23**</td>
<td>3.78**</td>
<td>1,107</td>
<td>.39</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>EDI Perfectionism</td>
<td>-1.97*</td>
<td>-1.97*</td>
<td>1,107</td>
<td>-.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDI Interpersonal Trust</td>
<td>-2.18*</td>
<td>-2.18*</td>
<td>1,107</td>
<td>-.21</td>
<td></td>
</tr>
</tbody>
</table>

Note. EDI = Eating Disorders Inventory. Gender was coded such that Males = 1; Females = 2. $PR$ = Multiple partial correlation for a set of predictors; $pr$ = partial correlation for within-set predictors.

* $p < .01$; ** $p < .05$. 
than male participants. In fact, gender was correlated with bulimic symptoms at the 1982 session \( (r = .20, p < .05, N = 111) \), such that females tended to report higher bulimia scores than males, even among this sample of males and females chosen for their chronic bulimic symptoms. Might the gender difference regarding severity of bulimic symptoms explain the finding of higher Drive for Thinness among females? Apparently not. When Bulimia scores were covaried from the analysis reported in Table 1, the relation between gender and Drive for Thinness remained \( (r = .23, t [106] = 2.43, p < .05) \).

Finally, it is noteworthy that a multivariate analysis of variance (MANOVA), with Drive for Thinness, Perfectionism, and Interpersonal Distrust as dependent variables, and gender as the independent variable, produced a significant multivariate effect \( F (3,107) = 6.23, p < .01 \). Examination of univariate means revealed that females with chronic bulimic symptoms obtained higher scores on Drive for Thinness than males with chronic bulimic symptoms, whereas males with chronic bulimic symptoms obtained higher scores on Perfectionism and Interpersonal Distrust than females with chronic bulimic symptoms.

In summary, results were supportive of the present predictions that females with chronic bulimic symptoms would report more Drive for Thinness, less Perfectionism, and less Interpersonal Distrust than males with chronic bulimic symptoms.

**DISCUSSION**

Past work comparing men and women with bulimia has detected a range of similarities, including age of onset, frequency of binge eating, and rate of comorbid psychiatric disorder. Except for sexual orientation, findings regarding gender differences have emerged less clearly; where differences have been found, they have aligned along two main dimensions—weight control and preoccupation, and interpersonal disruptions. The few studies directly comparing bulimic men and women have indicated that women are more concerned about weight and its control (Herzog et al., 1984), whereas men experience more relationship difficulties and isolation (Herzog et al., 1984; Schneider & Agras, 1987).

The present study followed up on these trends by examining Drive for Thinness, Perfectionism, and Interpersonal Distrust among a nonclinical sample of young adults who experienced elevated levels of chronic bulimic symptoms. Consistent with prediction and with past work, late adolescent females with chronic bulimic symptoms reported more Drive for Thinness, even compared to males with similar symptom levels. Moreover, males with chronic bulimic symptoms reported more Perfectionism and Interpersonal Distrust, even compared to females with elevated symptom levels.

These results have both theoretical and clinical implications. However, it is important to reiterate the study’s limitations. As noted earlier, this is a study of a range of chronic bulimic symptoms, from moderate to severe, and the study’s participants should not be viewed as having received a diagnosis of bulimia nervosa established through structured clinical interview. This limitation is offset somewhat by the inclusion of participants who experienced elevated levels of bulimic symptoms for a substantial portion of their lives. The replication of the present results among males and females formally diagnosed with bulimia nervosa is eagerly awaited. Also, the participants were from a very selective college and were primarily Caucasian, which may affect how generalizable the present findings are. Furthermore, methods were constrained by the procedures and scales of the 1982 study. Therefore, other factors that may have been of interest, such as EDI Body Dissatisfaction, were not examined. In addition, it is not claimed that bulimic women report normal levels of perfectionism and interpersonal distrust, or that bulimic men
report normal levels of drive for thinness. Indeed, relative to people free of eating pathology, all of the participants in the present study, males and females alike, obtained elevated scores on each of the three EDI subscales. Rather, the present results point to bulimia-related features that discriminate males from females with chronic bulimic symptoms. Lastly, effect sizes, although statistically significant, were of moderate to small magnitude.

Regarding theoretical implications, the current findings are suggestive (but not definitive) that gender differences in bulimic symptomatology are determined, in part, by sociocultural factors such as media and advertising portrayals of ideal women. To the extent that such factors are operative, they would be expected to differentially affect women more than men, and in the specific area of drive for thinness—precisely the pattern of the present results. Relatedly, the present results are not particularly supportive of the view that bulimia nervosa is an invariant, completely biologically driven disease process; as Carlat et al. (1997) argued, if it were, gender differences such as those obtained in the current study would not be expected. Finally, perfectionism and interpersonal distrust may represent particular risk factors for bulimic symptoms in men.

Clinical Implications

Regarding clinical implications, because bulimic men may not endorse extreme levels of drive for thinness—arguably the most salient feature of the bulimic syndrome—their symptoms may be particularly difficult to detect. Clinicians should be alert for the possibility of bulimia in male patients, particularly (but not only) those with perfectionistic and suspicious personality features. Once symptoms are detected, interpersonal therapy (Klerman, Weissman, Rounsaville, & Chevron, 1984) may be particularly helpful for bulimic men, because of its focus on improving the very problems that appear to characterize them. Because bulimic women appear to be particularly characterized by drive for thinness, therapeutics focusing on that aspect (e.g., variants of exposure with response prevention) may be especially indicated. Relatedly, a quite interesting avenue for future research is to determine differential effectiveness, if any, of treatments for bulimia nervosa (selective serotonin reuptake inhibitors, psychotherapies) in men versus women.

In conclusion, males and females with chronic bulimic symptoms may be distinguishable on the basis of personality features such as drive for thinness, perfectionism, and interpersonal distrust. Within the context of the study’s limitations, results were interpreted as relevant to the theoretical and clinical understanding of a chronic and pernicious disorder.

REFERENCES