Body Dissatisfaction, Bulimia, and Depression Among Women: The Mediating Role of Drive for Thinness

Michael W. Wiederman[1]* and Tamara L. Pryor[2]

[1] Department of Psychological Science, Ball State University, Muncie, Indiana
[2] Department of Psychiatry and Behavioral Sciences, University of Kansas School of Medicine-Wichita, Wichita, Kansas

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Abstract: **Objective:** *Past research has called into question the apparent relationship between body dissatisfaction and bulimia among women once effects of depression are statistically controlled. We further investigated interrelations among body dissatisfaction, depression, and bulimia, as well as considered individual differences in drive for thinness, within two samples of young adult women.* **Method:** *The first sample included women diagnosed with anorexia nervosa (*n *= 91) or bulimia nervosa (*n *= 142), whereas the second sample included college student women (*N *= 228). Respondents completed self-report measures of bulimia, drive for thinness, negative affect, and body dissatisfaction.* **Results:** *At the univariate level, all of the above constructs were significantly related to body dissatisfaction. In multiple regression analyses using depression and bulimia as predictors of body dissatisfaction, both were uniquely related to body dissatisfaction. These findings were similar to the results of previous research. However, when drive for thinness was added to the regression equations, drive for thinness was a unique predictor of body dissatisfaction whereas bulimia was not (neither was depression among college women).* **Discussion:** *Bulimia, depression, and body dissatisfaction may be the results of incorporation of cultural standards regarding thinness, hence the apparent relationships among these variables. The role of drive for thinness in the pathogenesis of depression and body dissatisfaction among women needs to be investigated further. © 2000 by John Wiley & Sons, Inc.* Int J Eat Disord 27: 90–95, 2000.

Key words: *body dissatisfaction; bulimia; drive for thinness; depression*

INTRODUCTION

Body dissatisfaction and bulimia are intimately related (American Psychiatric Association [APA], 1994; Rosen, 1990). Additionally, depression is prevalent among women with

**Correspondence to:* Dr. Michael Wiederman, Department of Psychological Science, Ball State University, Muncie, IN 47306-0520.

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eating disorders (Hinz & Williamson, 1987; Strober & Katz, 1988). Even within nonclinical samples, a positive relationship between body dissatisfaction and dysphoria has been found (Denniston, Roth, & Gilroy, 1992; Wilcox & Sattler, 1996). This frequent co-occurrence of body dissatisfaction, depression, and bulimia has led some to question the etiological role of negative body image in the experience of bulimia.

Among female college students, Joiner, Wonderlich, Metalsky, and Schmidt (1995) found that current levels of depression and bulimia were each uniquely related to self-reported body dissatisfaction. Also, these researchers compared small samples of women from a university setting (controls, $n = 32$) to women diagnosed with bulimia nervosa ($n = 23$) or depression ($n = 16$). Again, they found that depression was a significant predictor of body dissatisfaction above and beyond the presence of bulimia. Joiner et al. (1995) concluded: "At the least, the results suggested that body dissatisfaction is independently associated with bulimic and depressed symptoms. At the most, the results may indicate that body dissatisfaction is more a feature of depression or of a mixed bulimia-depression syndrome than of pure bulimia" (p. 353).

These results are intriguing in that they raise the possibility that women's body dissatisfaction is not a central feature of disordered eating. Unfortunately, the clinical samples they used were small and Joiner et al. (1995) noted the need for replication. Also, other questions are left unanswered. For example, what about women with anorexia nervosa? A substantial proportion of such women also experience bulimic symptoms (Pryor, Wiederman, & McGilley, 1996). Is depression uniquely related to body dissatisfaction beyond the effects of bulimic symptoms for these women?

Cooper and Taylor (1988) suggested that a precursor to the apparent link between depression and body dissatisfaction is an overconcern with body shape. It is possible that, among women with a high personal concern with body shape, depressed mood may accentuate this concern and result in increased body dissatisfaction (see Cohen-Tovee, 1993, for experimental results).

One of the diagnostic criteria for anorexia nervosa and bulimia nervosa is an overconcern with body shape and weight gain (APA, 1994), sometimes labeled "fear of fat" or "drive for thinness" (Garner, Olmsted, & Polivy, 1983). Stice (1994) hypothesized that internalization of social pressure to be thin was a precursor to body dissatisfaction, which then led to negative affect and, potentially, bulimia. This speculation begs the question, What are the temporal and causal links among drive for thinness, depression, bulimia, and body dissatisfaction for women?

Cross-sectional and correlational analyses cannot allow for a definitive answer to this question. However, in the current set of samples, we sought to investigate the relative strength of the relationships among these phenomena. Specifically, we hypothesized that drive for thinness would account for the greater body dissatisfaction among women with symptoms of depression and bulimia.

METHOD

Participants

The clinical sample consisted of 233 females consecutively evaluated at a university-based eating disorders clinic who met diagnostic criteria for either anorexia nervosa ($n = 91$) or bulimia nervosa ($n = 142$) outlined in the 3rd Rev. ed. of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R; APA, 1987). In line with current di-

agnostic practices (APA, 1994), women who had clinical symptoms of bulimia nervosa but also met diagnostic criteria for anorexia nervosa were classified with the latter. Thirty-nine (42.9%) of the women with anorexia nervosa were of the binge eating/purging type (APA, 1994). Mean ages were 22.04 years (SD = 8.55) for those with anorexia nervosa and 24.38 years (SD = 7.50) for those with bulimia nervosa.

Research participants in the second sample were 228 female college students enrolled in introductory psychology courses at a midsized, Midwestern state university. The mean age of participants was 19.16 years (SD = 3.74), with two thirds of the sample being 18 years of age and 88.2% of the sample being either 18 or 19 years of age.

Measures

Women in both samples completed the Drive for Thinness, Bulimia, and Body Dissatisfaction subscales from the Eating Disorders Inventory (EDI; Garner et al., 1983). With regard to depressive affect, women in the clinical sample completed the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961; Beck & Steer, 1987). Women in the college student sample completed a measure more appropriate for non-clinical populations, the Well-Being scale from the Multidimensional Personality Questionnaire (MPQ; Tellegen, 1982, 1985). Higher scores indicate more frequent experiences of pleasure, a generally cheerful outlook, optimism, and a general lack of depressive symptoms.

Procedure

For the clinical sample, upon presentation to the outpatient eating disorders clinic, 2-hr diagnostic assessments were conducted by faculty clinicians experienced in the evaluation of eating disorders. These assessments included separate semistructured interviews conducted by a psychologist and a psychiatrist as well as separate interviews with any family members who attended the evaluation. Diagnoses were consensually derived among members of the university clinical team who had performed the evaluation using strict diagnostic criteria (APA, 1987). Finally, participants completed the paper-and-pencil measures used in the current study. All measures were completed at the point of initial intake prior to diagnosis and treatment.

For the college student sample, potential participants were recruited through a well-established subject pool sign-up procedure. As with all studies involved in the pool, potential participants were unaware of the nature of the study until arriving at the testing site. None of the potential participants declined to participate upon learning of the nature of the study. All participants completed the anonymous questionnaire in groups of 5–20. All participants completed the questionnaire in the presence of the same female research assistant.

RESULTS

The intercorrelations among variables are presented in Table 1. Among depression, body dissatisfaction, bulimia, and drive for thinness, the only variables that were not related were drive for thinness and bulimia among the women who had anorexia nervosa. For all samples, increased depression, bulimia, and drive for thinness each was related to relatively greater body dissatisfaction.

Table 1. Intercorrelations among the measures as a function of diagnostic group and sample

	BDI/MPQ	EDI		
		Dissatisfaction	Bulimia	Drive for Thinness
Clinical sample				
BDI	—	.58*	.30*	.31*
Body Dissatisfaction	.33*	—	.34*	.56*
Bulimia	.22*	.24*	—	.19
Drive for Thinness	.31*	.52*	.45*	—
College student sample				
Body Dissatisfaction	−.25*	—		
Bulimia	−.22*	.41*	—	
Drive for Thinness	−.31*	.71*	.53*	

Note: Correlations above the diagonal are for the women with anorexia nervosa (n = 91) and those below the diagonal are for the women with bulimia nervosa (n = 142). BDI = Beck Depression Inventory (Beck et al., 1961; Beck & Steer, 1987) [clinical sample]; EDI = Eating Disorders Inventory (Garner et al., 1983); MPQ = Well-Being scale from the Multidimensional Personality Questionnaire (Tellegen, 1982) [college student sample].
*$p < .01$.

What are the unique predictors of body dissatisfaction among women with anorexia nervosa or bulimia nervosa? To address this question, setwise, hierarchical multiple regression analyses were performed, as had been done by Joiner et al. (1995) and as recommended by Cohen and Cohen (1983). The results of these analyses are presented in Table 2.

In the first model, only depression and bulimia scores were entered together as predictors of body dissatisfaction scores (as had been done in Joiner et al., 1995). For all samples, bulimia scores were significant predictors of body dissatisfaction. In the next set of analyses, drive for thinness was added to each model. For the clinical subsamples, depression and drive for thinness were significant predictors of body dissatisfaction beyond any effects due to bulimia. For the college student sample, drive for thinness was a significant predictor of body dissatisfaction beyond effects of depressive affect or bulimia. Also, after statistically controlling for depressive affect and drive for thinness, severity of bulimia was no longer related to body dissatisfaction in any of the samples.

DISCUSSION

At the univariate level, our results were generally consistent with those of Joiner et al. (1995) and extend into the clinical realm as we used larger samples of women with eating disorders and examined a group of women diagnosed with anorexia nervosa. Including depression and bulimia in the multivariate model, both variables were unique predictors of body dissatisfaction, at least within the clinical subsamples. Combined with earlier findings, it is clear that depression is a key correlate of body dissatisfaction among women with clinical eating disorders and may be more important than bulimia in predicting body image disturbance. Even among the women clinically diagnosed with bulimia nervosa, a relative lack of depression corresponded to less body dissatisfaction.

In all samples, when drive for thinness was added to the multivariate model, it was a unique predictor of body dissatisfaction beyond bulimia or depression. Also, after statis-

Table 2. Results of multiple regression analyses to predict body dissatisfaction

Predictors	R^2	*F* for Set	*df*	*Beta*	*t*	*p*<
Anorexia nervosa						
Initial model	.36	25.06*	2, 88			
BDI				.52	5.86	.0005
EDI Bulimia				.18	2.01	.05
Expanded model	.51	30.68*	3, 87			
BDI				.41	5.20	.0001
EDI Bulimia				.14	1.72	.09
EDI Drive for Thinness				.41	5.20	.0001
Bulimia nervosa						
Initial model	.13	10.83*	2, 139			
BDI				.29	3.56	.0005
EDI Bulimia				.17	2.14	.04
Expanded model	.30	20.07*	3, 138			
BDI				.18	2.45	.02
EDI Bulimia				−.01	−.19	.85
EDI Drive for Thinness				.47	5.79	.0001
College students						
Initial model	.20	27.92*	2, 225			
MPQ				−.17	−2.77	.007
EDI Bulimia				.38	6.17	.0001
Expanded model	.50	75.02*	3, 224			
MPQ				−.03	−.67	.51
EDI Bulimia				.06	1.04	.31
EDI Drive for Thinness				.66	11.65	.0001

Note: BDI = Beck Depression Inventory; EDI = Eating Disorders Inventory; MPQ = Multidimensional Personality Questionnaire.
*$p < .0001$.

tically controlling for drive for thinness, degree of bulimia was unrelated to body dissatisfaction (as was depressive affect among the college student women). So, among both women with and without diagnosed eating disorders, drive for thinness appears to be a key element of body dissatisfaction (also see Cooper & Taylor, 1988; Stice, 1994). It may be that drive for thinness (preoccupation with dieting and weight, fear of weight gain) is a marker for having incorporated perceived social pressures to attain a body approximating the cultural ideal. There is substantial pressure on women to maintain a relatively thin physique (Rodin, Silberstein, & Striegel-Moore, 1985) and some women appear to be relatively more sensitive to this pressure (Cash & Symanski, 1995; Heinberg, Thompson, & Stormer, 1995).

Our findings have important implications for the psychological pathogenesis of clinical eating disorders. It may be that incorporation of cultural beliefs regarding thinness as the equivalent of female beauty leads to greater drive for thinness, which then results in a hypercritical view of one's own body. Some women who experience these phenomena may go on to experience depression as a result of perceptions about having failed to meet cultural ideals for attractiveness. Some may then experience bulimia as a result of dietary restraint in an attempt to lose weight (Stice, 1994).

Elucidation of the temporal and causal links among bulimia, drive for thinness, depression, and body dissatisfaction awaits further research. However, our results demonstrate the importance of considering women's drive for thinness as an important potential mediating variable in the apparent relationship between negative body image and disordered eating.

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