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Author: Anna Brytek-Matera

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Chapter Six

Effects of feminine body image: body attitudes, body image self-discrepancy, and body dissatisfaction A comparison study between women with anorexia and bulimia nervosa*

Anna Brytek-Matera *Institute of Psychology University of Silesia*

Introduction

Our society becomes "lipophobic" (Fischer, 1990; in Brytek-Matera, 2008). Women like to be slim, and to have a slender, beautiful, young body and first and foremost one that is deprived of the excess of adipose tissue (fatty tissue). More and more often women, particularly with eating disorders, have a very negative attitude towards their own bodies and their physical appearance.

The concept of body image[1] is regarded as consisting of two components: one is the perception of current body size and shape, and the other is attitudes or feelings towards the body[2] (Fernández-Aranda et

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[1] Body image includes perceptual (e.g. body size estimation), cognitive (thoughts and beliefs about the body), affective (feelings about one's own body; e.g. body dissatisfaction), and behavioural components (e.g. body checking, controlling behaviours) (Exterkate, Vriesendorp and Jong, 2009).

[2] The construct named "body attitudes" has three facets: evaluation affect (evaluative thoughts and beliefs about one's appearance) or the discrete emotional body ex-

al., 1999; in Scagluisi et al., 2006). Similarly, two distinct modalities of body image dysfunction seem to be referred to anorexia nervosa: (a) perceptual body size distortion (estimation of one's body size: overestimation or underestimation) — makes reference to difficulty in accurately perceiving own body size (patients with eating disorders tend to estimate their size larger than it actually is), and (b) cognitive-evaluative dissatisfaction (attitudinal aspect) — indicates the patients' feelings of being generally or partly too fat or deformed, even though their perception may be unimpaired (Skrzypek, Wehmeier and Remschmidt, 2001). However, in Stice opinion (2002) the broad construct of body image disturbance[3] in bulimia nervosa relates to: (a) internalization of the socioculturally prescribed body image ideal (thin-ideal internalization), (b) negative subjective evaluations of one's physical appearance (body dissatisfaction), and (c) distorted perception of body image (body image distortion).

Skrzypek et al. (2001) suggested that anorexic and bulimic patients had more disturbances related to their attitudes towards body image. Kashima et al. (2003) reported that eating disordered patients, especially bulimic patients, have strong negative feelings toward their own body, indicating that women with bulimia had the most distorted and most negative body image. Scagluisi et al. (2005) found that "disparagement" (an intense loathing of the body) was the most distinguishing feature between eating disordered and non-clinical women.[4] Only among the eating-disordered group the feeling fat score was more associated with disparagement than with body mass index. This suggests that more than actually being fat, feeling fat is associated with self-loathing. This may indicate that there is an interaction between a perceptual distortion (feeling fat when body mass index is normal) and a negative body attitude (body disparagement).

A lot of contemporary theories regard body dissatisfaction to be the most direct or proximal antecedent to the development of eating disorders. Body dissatisfaction is part of the attitudinal component of body image and is situated in the evaluative and affective components of body

periences, investment, which means the importance of appearance and the behaviours intended to keep or improve it (Muth and Cash, 1997; in Scagluisi et al., 2006).

[3] One of the most potent risk factors for the development and maintenance of eating disorders is body image disturbance associated with the drive for thinness, the pressure to be thin and body dissatisfaction (in Exterkate et al., 2009).

[4] In this study, the authors used the Body Attitudes Questionnaire (Ben-Tovim and Walker, 1991). The BAT measures six distinct attitudinal dimensions: feelings of overall fatness ("I feel fat when I have my photo taken"), self-disparagement ("People laugh at me because of the way I look"), strength ("I try to keep fit"), salience of weight ("I get so worried about my shape that I feel I ought to diet"), feelings of attractiveness ("I usually feel physically attractive"), and consciousness of lower body fat ("I like to weigh myself").

attitudes (Scagluisi et al., 2006). One simpler definition of body dissatisfaction understands it as the difference between current body size (CBS) and ideal body size (IBS) (Gleaves et al., 2000; in Scagluisi et al., 2006).[5] The studies showed that women with bulimia, compared to women with anorexia nervosa and to women without eating disorders, are more dissatisfied with their bodies (Cash and Deagle, 1997; in Scagluisi et al., 2006). Scagluisi et al. (2006) reported a much higher body dissatisfaction in women with bulimia than in women without the ED.[6] The authors noticed also the ideal body was smaller among bulimic patients, which helps to explain their greater body dissatisfaction. Barry et al. (2003; in Scagluisi et al., 2006) emphasise that body dissatisfaction is a key feature of bulimia nervosa.

As part of this research the author paid attention to a particular dimension of the theory of Higgins (1987), which is a self-discrepancy theory (SDT). The SDT delineates the relation between different types of self-states representation and distinct kinds of emotional distress. Self-discrepancy theory provides a structure for understanding representations of the self and the consequences of inconsistent self-beliefs. According to self-discrepancy theory there are three domains of self-representation:

a) the actual self — which is one's representation of the attributes the person believes he/she actually possesses;
b) the ideal self — which is one's representation of the attributes that someone (either oneself or another) would like the person to possess;
c) the ought self — which is one's representation of the attributes that someone (oneself or another) believes the person should possess.

Ideal self and ought self are self guides that are personal standards that people construct. People hold ideal and ought self-beliefs from two standpoints: their own and from the standpoint of significant others (e.g., parents, friends). According to self-discrepancy theory, incongruence between the actual self and the ideal and ought self-guides leads to negative emotional experiences (Higgins, 1987). Discrepancy between the actual self and ideal self (the actual-ideal discrepancy) produces dejection-related emotions (e.g., sadness, disappointment, dissatisfaction, hopelessness), whereas the actual-ought discrepancy produces agitation-

[5] Current body size is considered a measure of body perception, while the ideal body size and the discrepancy between CBS and IBS are measures of body dissatisfaction (Gleaves et al., 2000; in Scagluisi et al., 2006).

[6] The clinical group consisted of 16 patients with bulimia nervosa and the control group was composed of 153 women. Participants were asked to choose one figure that they thought represented their body currently (CBS) and one that they thought to be the ideal body (IBS). An ideal discrepancy score was calculated by subtracting the IBS from CBS (Ideal discrepancy score = current body size — ideal body size).

related emotions (e.g. apprehension, threatened, uneasiness, tension, nervousness) (Bizman and Yinon, 2002). For example, if a woman believes that she is not overweight, but would ideally like to be thin and slim, she would likely feel displeasure or frustration; however, if a woman believes that she is not overweight and thinks that she ought to be thin and slim, this may cause her to feel guilty, nervous, or agitated.

In patients with eating disorders the actual-ought self-discrepancy predicted anorexic symptoms after controlling for actual-ideal self-discrepancy and dieting behaviours, however the actual-ideal self-discrepancies have been found to predict bulimic symptoms after controlling for appearance-related attributes and general actual-ought self-discrepancies (in Weishuhn, 2006). Harrison (2001; in Weishuhn, 2006) examined a mediational model of self-discrepancy, thin-ideal media exposure, and eating disorder symptoms, and found that actual-ideal self-discrepancies mediated the relations between thin-ideal television exposure and dieting, bulimic symptoms, drive for thinness, and body dissatisfaction. Research on self-discrepancy and disordered eating patterns suggests that the actual-ought self-discrepancy is especially important in the prediction of dieting and anorexic symptoms, while the actual-ideal self-discrepancy is especially important in the prediction of bulimic symptoms (Weishuhn, 2006).

Objective

The current study evaluated the relationship between subjective body experience and attitude towards body, body image self-discrepancy and dissatisfaction with the own body in a sample of women with anorexia and bulimia nervosa.

Methods

Participants

The sample of this study consisted of 50 female patients: 25 women with anorexia nervosa and 25 women with bulimia nervosa (see Table 1). It was 8 patients with anorexia restricting type (32%), 17 patients with

anorexia binge eating/purging type (68%), 20 patients with bulimia purging type (80%) and 5 patients with bulimia nonpurging type (20%). Diagnoses were made based on DSM-IV-TR (APA, 2000).

Table 1. Characteristics of the patients with anorexia and bulimia nervosa

Variable	Eating disorder patients	M	SD	p
Age	anorexia	20.08	2.99	.199
	bulimia	21.16	2.86	
Body Mass Index	anorexia	17.55	1.71	**.0001**
	bulimia	20.83	2.81	
Duration of eating disorder (in years)	anorexia	4.00	4.12	.864
	bulimia	2.55	2.31	

Legend: Significance of differences between research groups are marked in bold.

Materials

Figure Rating Scale

The FRS (Stunkard, Sorenson and Schlusinger, 1983) consists of nine silhouettes ranging in size from very thin (1) to very heavy (9). Participants were instructed to "pick the figure that best represents how you feel you look most of the time" (actual self). They were also asked to choose the figure that best represents their own ideal (ideal self) and they were asked to select the figure that matched what they thought they looked like (ought self) ("Which of these figures would your family and friends like you to resemble?").

Body Attitude Test

The BAT (Probst, Vandereycken, Van Coppenolle and Vanderlinden, 1995) is a self-report questionnaire (developed for female eating disorder patients) intended to measure subjective body experience and attitude toward one's body. The Body Attitude Test consists of 20 items composed of three subscales: negative appreciation of body size (e.g., "I feel my body as a burden"), lack of familiarity with one's own body (e.g., "My body appears as if it is not mine") and general body dissatisfaction (e.g., "When I look at myself in the mirror, I'm dissatisfied with my own body"). Female subjects rate their (dis)agreement with items on a 6-point scale (0—5), where the maximum total score is 100. The higher the score, the more deviating the body experience is.

Body Dissatisfaction Scale

The BD scale is a 9-item subscale of the Eating Disorder Inventory (Garner, Olmsted and Polivy, 1983) in which subjects indicate their degree of dissatisfaction with several body parts (e.g., "I think that my hips are too big"). The Body Dissatisfaction subscale measures the belief that specific body parts (such as the hips, thighs, buttocks) associated with shape change or increased "fatness" at puberty are too large.

Results

The means and standard deviations for the self, body attitude and body dissatisfaction in eating disorder patients appear in Table 2.

Table 2. Mean scores and standard deviation of the Figure Rating Scale, the Body Attitude Test and the Body Dissatisfaction Scale in anorexic and bulimic patients

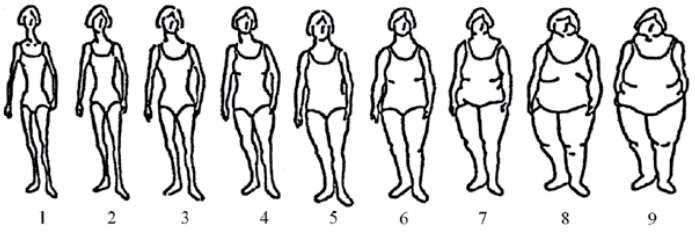
Variable	Eating disorder patients	M	SD	p
Figure Rating Scale				
Actual self	anorexia	5.20	2.00	.705
	bulimia	5.40	1.70	
Ideal self	anorexia	1.40	0.57	**.001**
	bulimia	2.24	1.09	
Ought self	anorexia	4.88	1.85	**.011**
	bulimia	3.60	1.52	
Body Attitude Test				
Negative appreciation of body size	anorexia	26.13	7.47	.752
	bulimia	26.72	5.24	
Lack of familiarity with one's own body	anorexia	21.48	5.83	.748
	bulimia	20.96	5.26	
General dissatisfaction	anorexia	14.17	4.10	.611
	bulimia	14.76	3.81	
Eating Disorder Inventory				
Body dissatisfaction	anorexia	20.75	5.88	.739
	bulimia	20.16	6.40	

Legend: Significance of differences between research groups are marked in bold.

In this study a student's t-test was used to determine if anorexic and bulimic patients had significantly different scores on the measures. *Pearson's r* was used to compute correlation coefficients between body attitudes and each of the independent measures of self and body dissatisfaction. The significance level adopted was $p < .05$.

Anorexic patients had higher scores than bulimic patients for ought self. However, bulimic patients had higher scores than anorexic patients for ideal self.

Among the patients with anorexia, 24% selected Figure 5 as their actual self, 64% stated that Figure 1 represents their ideal self and 24% thought that Figure 3 represents their ought self (see Figure 1). Instead, among the bulimic patients, 28% selected figure 6 such as their actual self, 36% stated that Figure 2 represents their ideal self and 36% thought that Figure 5 presents their ought self (see Figure 1).



Anorexic patients									
Body Mass Index		x							
Actual self	—	12	12	8	**24**	16	20	—	8
Ideal self	**64**	32	4	—	—	—	—	—	—
Ought self	4	—	**24**	12	28	12	12	4	4
Bulimic patients									
Body Mass Index			x						
Actual self	—	8	8	8	24	**28**	12	12	—
Ideal self	28	**36**	24	8	4	—	—	—	—
Ought self	4	28	20	8	**36**	—	4	—	—

Fig. 1. Actual, ideal and ought self in patients with anorexia and bulimia (percent)

For anorexic patients (see Table 3), increased lack of familiarity with one's own body was related to increased negative appreciation of body size. However, increased general dissatisfaction was related to increased negative appreciation of body size and increased lack of familiarity with one's own body, while increased body dissatisfaction was related to increased negative appreciation of body size, increased general dissatisfaction and increased actual self.

Table 3. Correlations between the body attitude and other variables in anorexic patients

Variable	1	2	3	4	5	6	7
Negative appreciation of body size		**.53****	**.52****	.39	.16	–.11	**.59****
Lack of familiarity with one's own body			**.59****	–.02	–.13	–.11	.22
General dissatisfaction				.18	.01	.18	**.55****
Actual self					.07	.27	**.50***
Ideal self						.26	–.27
Ought self							.02
Body dissatisfaction							

* $p < .05$
** $p < .01$

As shown in Table 4, in bulimic patients the more lack of familiarity with one's own body, the more negative appreciation of body size there is. In addition, the more general dissatisfaction, the more negative appreciation of body size and lack of familiarity with one's own body there are. Whereas, the higher the ideal self, the less lack of familiarity with one's own body and general dissatisfaction there are. The higher the ought self, the less negative appreciation of body size, lack of familiarity with one's own body and general dissatisfaction there are and the higher the ideal self there is. Finally, the more body dissatisfaction, the more negative appreciation of body size, lack of familiarity with one's own body and general dissatisfaction there are.

Table 4. Correlations between the body attitude and other variables in bulimic patients

Variable	1	2	3	4	5	6	7
Negative appreciation of body size		**.70****	**.75****	.19	–.27	**–.41***	**.75****
Lack of familiarity with one's own body			**.85****	.07	**–.45***	**–.47***	**.55****
General dissatisfaction				.03	**–.44***	**–.61****	**.58****
Actual self					.28	.17	.39
Ideal self						**.46***	–.35
Ought self							–.20
Body dissatisfaction							

* $p < .05$
** $p < .01$

Discussion

The present study shows that the discrepancy exists between actual self and ideal self among patients with anorexia and bulimia nervosa. In both cases, in women suffering from eating disorders ideal self body was definitely slimmer than their current self body. It should be emphasized that in examined clinical groups the realistic assessment of body image turned out to be incommensurate with the real appearance. In addition, the examined patient with eating disorders perceive their own silhouette as stouter, even then, their body mass index is underweight (in case of anorexic patients) or is in the normal range (in case of bulimia). This study found also that the aspect or attributes that one would like to possess are higher in groups with bulimia than those with anorexia, whereas the aspect or attributes that one believes one should possess are higher in the anorexic group.

While discussing self-discrepancy, it is appropriate to also pay attention to an actual-desired body weight discrepancy (ADBD). ADBD is defined as important in women with eating disorder symptoms when desired body weight is lower than actual body weight. This concept is defined in terms of a discrepancy between one's weight and one's personal ideal. ADBD is seen as a different but related construct to body dissatisfaction (nevertheless, body dissatisfaction is specifically related to body shape and size but not necessarily to self-discrepancy). A study by Tasca, Balfour, Kurich, Potvin-Kent and Bissada (2006) found that women with bulimia had a greater actual-desired body weight discrepancy related to greater body dissatisfaction and also lower self-concept. The authors thought that ADBD may be a vulnerability factor for developing bulimia nervosa or binge eating disorder for women.

The current study shows also that patients with anorexia and bulimia nervosa overestimated their body size and shape. The present research confirms the study by Benninghoven, Raykowsk, Solzbacher, Kunzendorf and Jantschek (2007) who found body fat overestimation in eating disorders with a clearer level of overestimation in anorexia nervosa patients.[7] These patients most strongly overestimated their bodies with a mean difference between perceived and desired body images. However, patients with bulimia nervosa longed to have a much thinner

[7] Overestimation of body size is not a universal characteristic of eating disorders. Negative body image and body dissatisfaction are much more common than perceptual size-estimation inaccuracy in patients with anorexia and bulimia nervosa (Cash and Deagle, 1997; Fernández-Aranda et al., 1999; in Scagluisi et al., 2006).

body image than they actually perceived their body to be. The authors noticed also that the higher self-ideal discrepancy was present chiefly in patients with bulimia. Benninghoven et al. (2007) argued that the overestimation in patients with anorexia nervosa may help patients keep a subjectively non-pathological image of their body by negating their severe underweight. In women with bulimia although, overestimation contributes to a subjectively pathological image by negating the normality of the body. Body image disturbance in patients with eating disorders is a problem of processing self-referential information regarding body image, but not a problem of processing body image related information by itself. Rating one's own perceived and desired body image highly activates self-schemata related to body size and shape. In females with eating disorders this leads to typical cognitive predispositions such as body dissatisfaction and body size misperception (Williamson et al., 2002; in Benninghoven et al., 2007).

Studies showed that patients with anorexia appear more satisfied with their body and report less weight dissatisfaction than bulimic patients, whereas patients with bulimia reported the greatest amount of body dissatisfaction (Mizes, Heffner, Madison and Varnado-Sullivan, 2004). Women with anorexia weigh less than their ideal weight while women with bulimia weigh more than their ideal weight. In addition, people with anorexia have consistently reported actual weights that were less than the perceived ideal weight. Mizes et al. (2004) concluded that anorexia patients may not be denying (or concealing) their body image dissatisfaction, rather, they may be reporting accurately their low level of body dissatisfaction relative to their unrealistically low perceived ideal weight. Their low level of body dissatisfaction may be one factor in their low motivation for treatment, especially weight gain.[8] Stice (2002) argues that patients with bulimia report elevated thin-idealization internalization, investment in appearance, body dissatisfaction, and body image distortions relative to individuals without eating disorders. Bulimic patients typically overestimate their body size. As Stice (2002) notices, this overestimation seems to be due to attitudinal disturbances rooted in an internalization of the thin-ideal.

As for the Body Attitude Test, the author compared the results of her own research to previous studies (Probst et al., 1997). As compared to the Belgian anorexic patients (N = 69), Polish patients with AN show a significantly higher negative appreciation of body size (M = 26.1 ± 7.4 vs.

[8] Brytek-Matera and Schiltz (2009) consider that improving body satisfaction might be a central aim of psychotherapy with people suffering from a lack of self-esteem, eventually preventing their evolution towards eating disorders.

M = 13.6 ± 7.9, p < .001) and a significantly higher lack of familiarity with one's own body (M = 21.4 ± 5.8 vs. M = 18.0 ± 8.7, p < .009). There were no statistically significant differences between the two groups of bulimic patients (of Belgian and Polish nationality) for body experience.

Results of study by Exterkate et al. (2009), evaluated in patients with different eating disorder subtypes[9], showed that significant differences were found for negative appreciation of body size. Patients with anorexia purging type (AN-P) showed significant lower score on the negative appreciation of body size than women with bulimia purging type (BN-P). However, women with anorexia restricting type (AN-R) had significantly lower negative appreciation of body size than three other groups: bulimia purging type (BN-P), bulimia nonpurging type (BN-NP) and eating disorder not otherwise specified (ENDOS) and they showed significantly lower score on overall body experience than women with bulimia purging type and those with eating disorder not otherwise specified. Exterkate et al. (2009) supposed that these results may reflect a temporary satisfaction with their current thin body, rather than actually a more positive body experience. The study furthermore showed that patients with anorexia (both type) and with bulimia (purging type) express more acceptance of their current body (they had lower body dissatisfaction), which suggests significant decreases in negative feelings about their body and body comparisons with others. It mean that they may still make every effort to release desired body ideals (they had negative appreciation of body size).

In the examined anorexic group, negative appreciation of body size was associated with lack of familiarity with one's own body, general dissatisfaction and body dissatisfaction. Additionally, general dissatisfaction was related to lack of familiarity with one's own body and body dissatisfaction. Moreover, there was a correlation between body dissatisfaction and actual self. In examined bulimic patients lack of familiarity with one's own body was related to negative appreciation of body size, general dissatisfaction, the ideal self, the ought self and body dissatisfaction. In addition, general dissatisfaction was associated with negative appreciation of body size, the ideal self, the ought self and body dissatisfaction. The ought self was correlated with negative appreciation of body size and the ideal self. Finally, body dissatisfaction was associated with negative appreciation of body size. In a sample of women with anorexia and bulimia nervosa, the correlations showed that determinants of feminine

[9] There were 89 patients who met the criteria for anorexia nervosa (AN-R = 41, AN-P = 48), 76 for bulimia nervosa (BN-NP = 18, BN-P = 58) and 28 for eating disorder not otherwise specified.

body image, that is subjective body experience and attitude toward body size and shape, body image self-discrepancy and negative thoughts and feelings about one's own body were connected.

Conclusion

The results of the present study indicated that therapeutic work with anorexic and bulimic women, in terms of negative body image, should focus attention on body attitude, the actual-ideal discrepancy, and body dissatisfaction.

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