The Confluence of Perfectionism, Body Dissatisfaction, and Low Self-Esteem Predicts Bulimic Symptoms: Clinical Implications

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We present a brief overview of empirically supported risk factors of bulimic behavior. We then propose an empirically supported, interactive, three-factor model of bulimic symptom occurrence from which we derive clinical implications for assessment, treatment, and prevention. Our research finds that perfectionism, body dissatisfaction, and self-esteem interact to predict bulimic symptoms. In particular, women who consider themselves overweight and who have elevated levels of perfectionism and lower levels of self-esteem show the greatest risk for bulimic symptoms. Thus, our model identifies three theoretically related targets for intervention: perfectionism, body dissatisfaction, and low self-esteem. Assessment of these factors is recommended. The extent to which cognitive-behavioral therapy for bulimia and interpersonal therapy for bulimia address these factors is reviewed and evaluated, and theory-based recommendations are made for prevention efforts.

An empirically supported theory of the occurrence of bulimic symptoms would have great clinical value because such a theory would highlight points

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for intervention. In this article, we review some of the most promising risk factors for bulimic behavior derived from both prospective and retrospective research, and propose a three-factor interactive model of bulimic symptomatology that has received empirical support. We then derive preliminary clinical implications of our model for the psychological assessment and modification of factors contributing to bulimic symptoms.

Overview of Risk Factors

Risk factors for bulimia nervosa include personal and environmental vulnerability factors: dieting, perfectionism, body dissatisfaction, low self-esteem, and disturbed family interactional patterns (Fairburn & Wilson, 1993). Studies of binge eaters (Garfinkel, Modofsky, & Garner, 1980; Pyle, Mitchell, & Eckert, 1981), human starvation (Keys, Brozek, Henschel, Mickelsen, & Taylor, 1950), and animals (Coscina & Dixon, 1983) all converge on the conclusion that dieting appears temporally before binge eating. Bulik, Sullivan, Carter, and Joyce (1997) add to this literature with their recent finding that dieting predated binge eating in 81% of their study participants with bulimia nervosa. According to Polivy and Herman (1985), dieting is a “cognitively mediated activity” whose success relies on effectively ignoring physiological pressures (e.g., hunger) and substituting them with cognitive controls. When the inhibitory cognitions on which the dieter depends are interfered with (for example, by negative affect), disinhibited eating may emerge.

Perfectionism is another risk factor that has long been considered important in the etiology of eating disorders. Several studies have documented an association between perfectionism and eating disturbances (Davis, 1997; Hewitt, Flett, & Ediger, 1995; Joiner, Heatherton, Rudd, & Schmidt, 1997; Kiemle, Slade, & Dewey, 1987; Timko, Striegel-Moore, Silberstein, & Rodin, 1987). For example, Timko et al. (1987) found that in their sample of high school girls and college women, those who adhered to a “superwoman ideal” (i.e., global perfectionism, pursuit of excellence in multiple roles) were at greater risk for eating problems.

Body dissatisfaction also has been suggested as a risk factor for bulimia nervosa. Body dissatisfaction, and, in particular, wanting to be thinner, predicts dieting, which is a well-established risk factor for binge eating (Fairburn & Wilson, 1993). Killen et al. (1996) used a 4-year prospective design to find that teenage girls with higher scores on a measure of weight concern were more likely to develop a partial syndrome eating disorder. Striegel-Moore, Silberstein, Frensch, and Rodin (1989) found that an increase in weight dissatisfaction was associated with a worsening of disordered eating symptoms across the freshman year of their undergraduate sample.

Low self-esteem has been associated with both dieting and binge eating. While there is some debate over whether low self-esteem is a precursor to dieting and bulimic behaviors or a consequence (e.g., dieters who experience dietary failures may begin to feel worse about themselves), or both, binge
eating does seem to occur more in those with low self-esteem (Fairburn & Wilson, 1993). Heatherton and Polivy’s (1992) spiral model of the development of eating disorders posits a reciprocal relationship between dieting and self-esteem: “Because each dietary failure may produce lower self-esteem and because lower self-esteem may, in turn, make dietary failure more likely, individuals who undertake chronic dieting may enter a spiral in which each failure at dieting produces greater negative affect and precludes either successful acceptance or successful alteration of their bodies” (Heatherton & Polivy, p. 139).

In terms of environmental factors, there is evidence that bulimic individuals and, to a certain extent, their parents, perceive their families as having more conflict and less cohesion and nurturance when compared with nonbulimic individuals (Fairburn & Wilson, 1993). Fairburn, Welch, Doll, Davies, and O’Connor (1997) found that parental problems, parental psychiatric disorders, and a history of sexual or physical abuse were environmental factors strongly associated with bulimic status in their study of bulimic individuals, healthy controls, and general psychiatric controls.

Much of the support for risk factors has come out of correlational studies that find that bulimic individuals are more likely to exhibit these features than nonbulimic individuals. Furthermore, most of these risk-factor studies have focused on the risk factors separately, precluding understanding about relative contributions and interactive effects. Fairburn et al.’s (1997) community-based case-control study of risk factors for bulimia nervosa provides a notable exception with their examination of the relative contribution of multiple hypothesized risk factors. They found that risk factors that increased the risk of dieting (e.g., concerns about shape, weight, or eating) as well as those that increased the risk for psychiatric disorder in general (e.g., parental psychiatric disorder), increased risk for bulimia nervosa. The risk factors that they found significantly more common among bulimic individuals than among general psychiatric controls included negative self-evaluation and parental problems such as high expectations. While the risk-factor studies described in this overview provide an essential starting point, future progress in the understanding of risk for bulimic behaviors will require additional prospective studies and a shift toward risk mechanisms that highlight how risk factors operate to increase risk (Fairburn et al.).

A Three-Factor Interactive Model of Bulimic Symptoms

Vohs, Bardone, Joiner, Abramson, and Heatherton (1999a) and Joiner, Heatherton, Rudd, et al. (1997) begin to conceptualize how risk factors might work together to create a pathway to bulimic behavior. Their starting point is a reconceptualization of perfectionism as a risk factor for bulimia nervosa. Intuitively, perfectionism, described as the desire to achieve ambitious and even faultless standards (Brouwers & Wiggum, 1993), should have a link to eating disorders since individuals with eating disorders typically strive to achieve
standards of thinness that are difficult for them to meet. Although perfectionism has long been associated with eating disorders (Garner, Olmstead, & Polivy, 1983), the link has been largely correlational and atheoretical as well as unstable (Fryer, Waller, & Kroese, 1997; Joiner, Heatherton, & Keel, 1997). Vohs, Bardone, Joiner, et al. (1999) and Joiner, Heatherton, Rudd, et al. (1997) propose a theoretically driven model that conceptualizes perfectionism as a risk factor for bulimia nervosa, but only in interaction with other factors.

Joiner, Heatherton, Rudd, et al. (1997) hypothesized that perfectionistic women will experience bulimic symptoms if they experience body dissatisfaction (defined, in these studies, as perceiving oneself to be overweight), but that when perfectionistic women do not experience body dissatisfaction (i.e., do not perceive themselves to be overweight), they will not experience bulimic symptoms. In this way, Joiner and his colleagues propose a vulnerability-stress model, with perfectionism as the vulnerability to be activated by the stress of body dissatisfaction (i.e., not meeting a weight standard). Joiner et al. found support for this vulnerability-stress model across two distinct samples of women (a group of undergraduates with an average age of 20, and a different group of undergraduates followed up about 10 years post-college at an average age of 30). Statistically, they found that the Perfectionism × Body Dissatisfaction interaction was a significant predictor of bulimic symptoms (measured using the Eating Disorder Inventory [EDI; Garner et al., 1983] Bulimia subscale), beyond the main effects of perfectionism and body dissatisfaction. Since the study design was cross-sectional, the vulnerability-stress model was not fully tested, but the results suggest perfectionism as a risk factor for bulimic symptoms only when weight standards are perceived to have gone unmet. Interestingly, it was perceived weight status and not actual weight status that impinged most powerfully on perfectionism in the interaction. Joiner et al. found that perfectionistic women who perceived themselves to be overweight but were not (as determined by body mass index) had significantly higher EDI bulimia scores than perfectionistic women who did not perceive themselves as overweight but were. This suggests that it is the perception of not meeting a standard that is important, in interaction with perfectionism, to predict bulimic symptomatology.

Vohs, Bardone, Joiner, et al. (1999) added to the two-way interactive model proposed by Joiner, Heatherton, Rudd, et al. (1997). In terms of design, they added a prospective element by assessing female students before they entered college, and then a second time during their first year of college. In terms of theory, they reasoned that there must be a moderator variable to account for the perfectionist who, when faced with a subpar outcome (e.g., perceived overweight status), is motivated to act instrumentally to meet or reevaluate the standard rather than engage in counterproductive behavior such as binge eating. They hypothesized that self-esteem moderates the relationship between the interaction of perfectionism and body dissatisfaction in predicting bulimic symptoms. That is, perfectionists who experience body dissatisfaction (i.e., who perceive themselves to be overweight) will show higher levels
of bulimic symptoms if they have lower self-esteem, but not if they have higher self-esteem. Fairburn (1995) similarly highlights self-esteem and perfectionism as common characteristics among those who binge, and suggests that these traits typically precede the eating problem.

To test this hypothesis of interacting risk factors, bulimic symptomatology (as measured using the EDI Bulimia subscale) at Time 1 was entered first in a hierarchical multiple regression model to control for initial levels of bulimic behavior, with Time 2 bulimic symptomatology as the dependent variable. Next, levels of perfectionism, body dissatisfaction (i.e., perceived overweight status or not), and self-esteem were entered simultaneously, followed by the resulting two-way interactions, and then the three-way interaction of Perfectionism × Body Dissatisfaction × Self-Esteem. Not surprisingly, Time 1 bulimic symptomatology accounted for the majority of the variance (0.5281) in Time 2 bulimic symptomatology. Of interest, neither the simultaneously entered main effects of body dissatisfaction, perfectionism, and self-esteem nor the simultaneously entered two-way interactions significantly predicted Time 2 bulimic symptomatology (changes in $R^2 = .0003$ and .0047, respectively). Finally, the three-way interaction significantly predicted Time 2 bulimic symptomatology (change in $R^2 = .0070$, $p < .05$). The results of the Vohs, Bardone, Joiner, et al. (1999) study support the three-way interactive model: Perfectionism, body dissatisfaction, and self-esteem interacted to predict bulimic symptoms, beyond the initial levels of bulimic symptoms. Although the statistically significant predicted interaction among perfectionism, body dissatisfaction, and self-esteem accounted for only a relatively small percentage of the variance, this may be due to overly conservative analyses (i.e., controlling for Time 1 bulimic symptomatology, which results in the prediction of variance accounted for beyond what is accounted for by Time 1 symptomatology), and thus may underestimate the true impact of the interaction of perfectionism, body dissatisfaction, and self-esteem on the occurrence of bulimic symptoms. (See Alloy, Abramson, Raniere, and Dyller [1999] for a discussion of the potential for overly conservative tests of vulnerability-stress hypotheses when initial symptom levels are used as covariates.) Relatedly, the fact that Time 1 levels of bulimic symptoms accounted for approximately 53% of the variance in Time 2 levels makes it difficult for other variables entered after initial symptom levels to have a large predictive effect.

Thus, Vohs, Bardone, Joiner, et al. (1999) showed that women who perceived themselves to be overweight and who had elevated levels of perfectionism and lower levels of self-esteem were most at risk for bulimic symptoms. Women who were not at the extreme ends of the continua of each of these variables had significantly lower bulimic symptoms (e.g., women with higher levels of self-esteem seemed to be buffered from bulimic symptoms even if they had high levels of perfectionism and perceived themselves to be overweight). The three-way interaction among perfectionism, body dissatisfaction, and self-esteem has been replicated, again with a longitudinal design, using a different sample (state university students instead of private univer-
University students, Southwest instead of Northeast) and some different measures (for self-esteem and body dissatisfaction; Vohs, Bardone, Katz, et al., 1999).

Together, these studies highlight three important, theoretically related factors associated with risk for bulimic symptoms that make up our model of bulimic symptom occurrence: perfectionism, body dissatisfaction, and self-esteem. While additional prospective tests of this model are clearly necessary, these initial findings suggest a promising interactive model. When a highly perfectionistic individual fails to meet a standard, there will likely be ensuing negative affect and negative thoughts about the self, which may be fleeting or even nonexistent among higher self-esteem individuals, but lingering and more intense among lower self-esteem individuals. The more highly perfectionistic, lower self-esteem individual who perceives that she has failed to meet a standard (e.g., perceives herself to be overweight) may be motivated to escape from the negative feelings and thoughts about herself. Binge eating may provide one way to achieve this coveted escape from meaningful negative thought about the self (Heatherton & Baumeister, 1991).

An important implication of our three-way interactive model is that each of the three factors (perfectionism, body dissatisfaction, and low self-esteem), when taken alone, is not as predictive of bulimic symptoms as when the "appropriate" levels of each are in place. For example, simply knowing that someone is perfectionistic will not necessarily be helpful in predicting bulimic symptomatology. Our studies found that women with elevated levels of perfectionism who had higher levels of self-esteem and/or who did not perceive themselves to be overweight were not at great risk for bulimic symptoms. Instead, our three-factor model emphasizes that it is the joint presence of elevated perfectionism levels, body dissatisfaction, and lower self-esteem levels that increases risk for bulimic symptoms, and that modification of any of the three factors (perfectionism levels, body dissatisfaction, and self-esteem levels) should result in a reduction of bulimic symptoms.

With our model as a guide, what assessments are suggested in the service of intervention and prevention? What extant treatments are best suited to address our theory-based targets of intervention for bulimic symptoms, and how does our model inform prevention?

**Assessment**

Given that our model highlights the three factors of perfectionism, body dissatisfaction, and self-esteem as instrumental in predicting the occurrence of bulimic symptoms, it is important to adequately assess their status. Two commonly used, reliable and valid assessment tools of eating disorders are the Eating Disorder Inventory (EDI; Garner et al., 1983) and the Eating Disorder Examination interview (EDE; Fairburn & Cooper, 1993). The EDI is a self-report, pencil-and-paper measure composed of eight scales. Among these scales are a perfectionism subscale, a 6-item scale that assesses two aspects of perfectionism which, combined, constitute a measure of general perfection-
ism: self-oriented perfectionism (e.g., "I hate being less than the best at things") and socially prescribed perfectionism (e.g., "Only outstanding performance is good enough in my family"). Although the EDI does not include a self-esteem scale, the EDI’s Ineffectiveness scale taps into elements of self-esteem and self-efficacy. This scale is a 10-item scale and includes items such as "I have a low opinion of myself" and "I feel generally in control of things in my life." Finally, although the EDI does not include a question about perceived weight status, it does include a scale on general body dissatisfaction. This scale is composed of eight items such as "I think that my thighs are too large" and "I think that my stomach is too big." This scale provides a sense of a perceived shape (and potentially weight) discrepancy. Vohs, Bardone, Katz, et al. (1999) used the EDI Body Dissatisfaction scale (a continuous measure of body dissatisfaction) in place of perceived overweight status to successfully replicate the three-way interaction reported in Vohs, Bardone, Joiner, et al. (1999).

The EDE is an interviewer-based, semistructured interview designed to diagnose anorexia nervosa and bulimia nervosa. It does not provide a general assessment of perfectionism or self-esteem, but it does assess perceived weight discrepancies. For example, it assesses both weight and shape dissatisfaction, as well as the desire to lose weight. The EDE also asks about current weight and desired weight, thus providing a numeric value for perceived discrepancy from an ideal weight.

Joiner, Heatherton, Rudd, et al. (1997) and Vohs, Bardone, Joiner, et al. (1999) both used a measure of general perfectionism, the Perfectionism subscale of the EDI. Alternative, more extensive, measures of general perfectionism come from Hewitt and Flett (Hewitt & Flett, 1991) and Frost and his colleagues (Frost, Marten, Lahart, & Rosenblate, 1990), preeminent researchers in the field of perfectionism. Hewitt and Flett’s Multidimensional Perfectionism Scale is a 45-item scale with subscales of self-oriented perfectionism (expecting the self to be perfect), socially prescribed perfectionism (perceiving that others expect perfection from you) and other-oriented perfectionism (expecting others to be perfect). (The theory presented in the current article argues for the importance of the self-oriented and socially prescribed subscales, since it is perfectionism related to the self, regardless of the source, that is predictive in our model.) Frost et al.’s Multidimensional Perfectionism Scale is a 35-item scale with the following subscales: Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, Doubts about Actions, and Organization. While further work needs to be done to assess the importance of general versus domain-specific perfectionism in the model, there are some reasons to suggest that general perfectionism might be most important. Most notably, the generality of the perfectionism may be most potent since having high standards in general (i.e., across multiple domains) is what provides more opportunities for discrepancies, which in turn increases vulnerability to negative thoughts and feelings in the face of the failures to meet standards.
Vohs, Bardone, Joiner, et al. (1999) measured general self-esteem using a modified version of the State Self-Esteem Scale (SSES; Heatherton & Polivy, 1991). Previous research has identified three subscales within this scale: appearance, social, and performance self-esteem. (In Vohs, Bardone, Joiner, et al. [1999], items from the Appearance subscale were excluded due to conceptual and statistical overlap with the stressor of body dissatisfaction.) Another reliable and valid self-esteem measure is the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965), a 10-item scale that provides a unidimensional measure of global feelings of self-worth and self-acceptance. Vohs, Bardone, Katz, et al. (1999) replicated our model using the RSES instead of the SSES.

An ongoing study is considering whether self-efficacy, rather than self-esteem, is the more relevant concept for our model (Bardone, 1999). Self-efficacy refers to the belief that one can achieve what one sets out to do (Bandura, 1997). Theoretically, it is conceivable that an individual with elevated levels of perfectionism who encounters a self-standard discrepancy, but who has elevated levels of self-efficacy, will not sink into the negative thoughts and feelings about the self that can motivate escape. Instead, she will believe she has the ability to make changes or adapt, thus bypassing self-focused negativity. Preexisting theories suggest that self-efficacy might do a better job than self-esteem of predicting bulimic symptoms in our model. Bandura's (1997) self-efficacy theory argues that self-efficacy is a key determinant of behavior: "Whether perceived discrepancies between personal standards and attainments are motivating or discouraging is likely to be determined by the strength of the people's perceived capabilities [i.e., their sense of self-efficacy] to attain the standards they have been pursuing. Those who distrust their capabilities are easily discouraged by failure, whereas those who are highly assured of their efficacy for goal attainment will intensify their efforts when their performances fall short and persevere until they succeed" (Bandura & Cervone, 1986, p. 93). Furthermore, there is an impressive literature on learned helplessness that echoes the importance of self-efficacy. Both animal and human studies have found that organisms who expect to control events persist, whereas those who do not expect to have control give up and exhibit depressed affect (Abramson, Seligman, & Teasdale, 1978). There are few measures of general self-efficacy, but the Self-Efficacy Scale (Sherer & Adams, 1983) is the most extensively researched and commonly used. Similar to perfectionism, further work needs to be done to assess the importance of general versus domain-specific self-esteem and self-efficacy in the model. Bandura (1986) argues that self-efficacy specific to a task or domain is most predictive of behavior and would propose using self-efficacy measures tailored to the domain of interest (e.g., the sense of self-efficacy or confidence that one can attain one's appearance goals or reach an acceptance of current appearance).

Joiner, Heatherton, Rudd, et al. (1997) and Vohs, Bardone, Joiner, et al. (1999) both used body dissatisfaction as the stressor. This perception was assessed by asking participants to classify their current body weight into one
of the following categories: very underweight, underweight, average, overweight, or very overweight. Participants who considered themselves to be overweight or very overweight were categorized as perceiving themselves to be overweight.

Joiner, Heatherton, Rudd, et al. showed that *perceived* overweight status was more predictive in the interactive model than *actual* overweight status; thus, a simple question could gather information about perceived weight status as a body dissatisfaction measure.

It is possible that discrepancies from standards in areas other than weight may also be relevant to our three-factor model. For example, an interpersonal stressor (e.g., a dissatisfaction with a romantic partner, a fight with a friend) or an achievement stressor (e.g., a lower grade than desired, a poor job performance evaluation), if interacting with high perfectionism and low self-esteem, could similarly invoke negative thoughts and feelings motivating escape through binge eating. Assessment of a broader spectrum of difficulties (e.g., failures to meet standards in diverse areas) would be potentially very useful in working within this theoretical framework. A comprehensive measure like the Life Events Scale (LES; Needles & Abramson, 1990) taps the occurrence of recent negative events and situations that, in conjunction with the other key variables in our model, may serve to predict the occurrence of bulimic behavior.

Although, as noted earlier, substantial evidence supports the role of dieting in the development of bulimic symptoms, our initial work on our three-factor model did not include dieting. An ongoing study (Bardone, 1999) has incorporated dieting into the conceptual model and is testing whether dieting influences the choice of escape behavior in response to negative thoughts and feelings about the self that come from the interaction of perfectionism, low self-efficacy, and an unmet standard or ego threat. The findings of this study may support Fairburn et al.'s (1997) proposal that, in the wake of unsuccessful broad-based intervention efforts to reduce dieting, focusing on subgroups of dieters rather than dieting in general would be more fruitful. When inhibitory cognitions on which dieters depend are interfered with by self-relevant distress (such as might be experienced by a highly perfectionistic, lower self-esteem person who perceives herself as overweight) and attempts are made to escape from meaningful thought, disinhibited eating is a likely outcome (Heatherton & Baumeister, 1991). Future research may support a four-factor model of dieting, perfectionism, body dissatisfaction, and ego threat.

**Psychological Treatment**

**Cognitive Behavioral Therapy (CBT)**

CBT has substantial empirical support as an efficacious treatment for bulimia nervosa (e.g., Wilson & Fairburn, 1993), and is considered the treatment of choice for this eating disorder. This treatment focuses both on the behavioral manifestations of bingeing, purging, and dietary restraint, and on the dysfunctional thoughts and beliefs related to these behaviors and to the
significance of weight and shape. The cognitive-behavioral model of the maintenance of bulimia nervosa begins with low self-esteem and great value being placed on body weight and shape (Wilson, Fairburn, & Agras, 1997). In Wilson et al.'s CBT model, extreme concern about weight and shape leads to rigid, unrealistic, and greatly restrictive eating that increases susceptibility to periodic loss of control over eating (i.e., binge eating).

CBT for bulimia nervosa addresses perfectionism by identifying and challenging dysfunctional, rigid thoughts revolving around perfectionistic themes of weight and shape such as "to be thin is to be attractive, successful, and happy" (Wilson et al., 1997, p. 74). In general, the perfectionistic ideals focused on in CBT for bulimia nervosa relate to weight and shape, but it is certainly within the spirit of CBT to focus on other domains or global thinking (e.g., "I need to be perfect in school to feel good about myself"); "If I'm not perfect, I'm worthless"). Fairburn (1995) identifies dichotomous or all-or-nothing thinking (e.g., "If I eat one cookie, I'll have to eat the whole box of cookies") as a common characteristic, related to perfectionism, among those who binge eat. In particular, he points out that all-or-nothing thinking may contribute to the setting of high goals in terms of dieting and weight and to the case of abandonment of control after the slightest dietary transgression. Future research should assess whether perfectionism or dichotomous thinking plays a more important role in the occurrence of bulimia.

Self-esteem, another point of intervention set forth in our theoretical model, is an important conceptual part of the cognitive-behavioral approach. By helping individuals make changes in entrenched eating patterns, there is an associated increase in self-efficacy (i.e., "I have the power to make changes") and self-esteem. Also, dysfunctional thoughts and beliefs about worthlessness and the bases of low self-esteem are directly challenged in CBT.

In the CBT model of bulimia nervosa, extreme concern about shape and weight is considered of primary importance. Thus, this therapeutic model directly addresses perceptions of being overweight and the subjective implications of this for the individual. Individuals are educated about healthy weight ranges and body mass index to help undermine these perceptions of overweight. Dysfunctional thoughts about weight and shape (e.g., "I am fat"; "I must lose weight") are identified and examined (both evidence for and against the thoughts), followed by an investigation of the beliefs, values, and origins underlying these thoughts. In the course of investigating and challenging dysfunctional thoughts and underlying beliefs, cognitive restructuring occurs. For example, after reviewing the evidence, a person might come to think that she is, in fact, overweight, but be less won over by the belief that this means that she is a failure, unattractive, and weak. While CBT for bulimia has traditionally focused on dysfunctional thoughts and beliefs revolving around weight and shape, this approach could be more broadly applied to thoughts and beliefs in other domains (achievement, interpersonal) if discrepancies in them are found to trigger bulimic behavior.
Interpersonal Therapy (IPT)

The systematic application of IPT to bulimia nervosa is more recent than that of CBT. Studies by Fairburn and his colleagues (Fairburn et al., 1991; Fairburn, Jones, Peverer, Hope, & O'Connor, 1993; Fairburn, Kirk, O'Connor, & Cooper, 1986) found that IPT had a significant positive effect in bulimia nervosa treatment outcome studies and was comparable to CBT in follow-up studies. IPT focuses on the identification and modification of current interpersonal problems and steers away from discussion about eating, shape, and weight since preoccupation with these issues is viewed as distracting from the important underlying interpersonal problems (Fairburn, 1998).

Although IPT does not include perfectionism explicitly in its model or stages, it allows for the discovery and evaluation of perfectionistic thinking in interpersonal terms. For example, an assessment of current interpersonal functioning would include questions about expectations held for the self and others, which would shed light on perfectionistic thinking that might impinge on relationships, as well as interpersonal contexts that might foster perfectionism. When focusing on any unreasonably perfectionistic thinking relative to her role in a relationship, a client may evaluate the relative advantages and disadvantages of perfectionism, and consider how she can either scale down her expectations for herself or more closely approximate the expectations.

Self-esteem is also addressed in IPT for bulimia nervosa. Information about self-esteem problems is gathered, as are current interpersonal situations that might influence self-esteem. Clients' active roles in working through problems and making changes can have the effect of bolstering self-efficacy and self-esteem since the client will be experiencing her ability to help herself. Interestingly, most theories of self-esteem (e.g., the sociometer theory developed by Leary, Tambor, Terdal, & Downs, 1995) are interpersonal in nature, suggesting an important link between interpersonal satisfaction and self-esteem.

Given IPT's conscious intention not to discuss weight issues (aside from the initial history-gathering), this therapeutic framework is not very amenable to addressing body dissatisfaction (e.g., discrepancy from a weight standard). However, it is very well poised to exploring discrepancies, setbacks, and stressors that might exist in the interpersonal domain, especially in the investigation of the circumstances preceding binges.

Taken together, how well do CBT and IPT for bulimia nervosa address the theoretical points of intervention in the model put forth by Joiner, Heatherton, Rudd, et al. (1997) and Vohs, Bardone, Joiner, et al. (1999)? CBT addresses perfectionism by challenging dysfunctionally perfectionistic thinking by evaluating the validity, advantages, and disadvantages of perfectionistic thoughts and the underlying beliefs. IPT does not deal with perfectionism explicitly, although it provides a framework in which perfectionistic thinking or contexts impinging on relationships can be explored. Both treatments explicitly assess and address self-esteem and bolster self-efficacy by promoting practice and confidence in abilities to change. While CBT is structured to
challenge stressors like experiencing body dissatisfaction, IPT’s philosophy prevents it from exploring weight- or eating-related stressors, choosing instead to focus on interpersonal stressors. If, in fact, our theoretical model can be extended to include self-standard discrepancies in areas other than weight, then IPT will be able to help identify self-standard discrepancies in interpersonal contexts. While the cognitive-behavioral approach to affecting change on perfectionism, self-esteem, and body dissatisfaction appears to be more naturally aligned with our theory, the IPT perspective makes an important contribution to the CBT approach. Specifically, the IPT perspective can enhance the CBT perspective by identifying the interpersonal contexts promoting or sustaining the three factors identified in our model: perfectionism, low self-esteem, body dissatisfaction. For example, identifying, in the course of a review of current interpersonal relationships, that a client’s boyfriend often points to women on the street saying “no man would ever be interested in her; she needs to lose at least five pounds” provides additional information about a context that can promote a sense of need for perfection, a sense of lowered self-esteem (if the client projects those comments onto herself), and a perceived discrepancy for weight.

Prevention

Our three-factor model of bulimic behavior has clear preventive implications in that it highlights vulnerabilities that would place someone at increased risk for binge eating. Following Fairburn et al.’s (1997) proposal that focusing on theoretically suggested subgroups of dieters, rather than on dieting in general, would be a more effective prevention strategy, it seems likely that gearing prevention efforts toward dieters with a lower sense of self-efficacy or excessively high standards would be fruitful. In terms of primary prevention (helping “create” people who would not be at risk for bulimic symptomatology), our model suggests, for example, efforts at ensuring higher levels of self-esteem and self-efficacy, and at maintaining body satisfaction. In terms of secondary prevention (working with people who possess a vulnerability that may place them at risk for bulimic symptomatology), our model suggests reducing the key vulnerabilities of lower levels of self-esteem and self-efficacy, unreasonably high standards, and body dissatisfaction. Since our theoretical model of perfectionism, body dissatisfaction, and low self-esteem proposes that a change in any of the three elements will reduce risk for bulimic symptoms, there is flexibility in where to focus preventive efforts.

Choosing Targets for Modification in Intervention and Prevention

An argument can be made for not making perfectionism the typical focus of intervention or prevention, since perfectionism in and of itself may not be bad (which is a harder stance to argue regarding low self-esteem or low self-efficacy). In fact, striving for high standards is part of what allows for indi-
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viduals’ achievement of high standards. A person with high levels of perfectionism and high levels of self-esteem could find setbacks motivating—something to be met with vigor, as a challenge. As a case study, consider Arnold Schwarzenegger, the world-renowned bodybuilder. We present the following Schwarzenegger anecdote because its combination of perfectionism, self-efficacy, and unmet standard models the theory and is easily accessible to the reader in biographical book form (Schwarzenegger & Hall, 1977). According to autobiographical accounts, Schwarzenegger is a perfectionist with a high sense of self-efficacy who, when confronted with a perceived flaw in his appearance (e.g., “skinny” calves), powerfully mobilizes his resources to correct the flaw (Schwarzenegger & Hall, 1977). If Schwarzenegger had lower self-esteem or a lower sense of self-efficacy in addition to his elevated perfectionism and perceived appearance flaw, he might be at risk for lingering and intense negative feelings and thoughts related to himself. Reducing perfectionism may have reduced negative affect and cognitions, but it may also have put a lower ceiling on his bodybuilding achievements. Improvement of his self-esteem or sense of self-efficacy, however, would also have reduced negative affect and cognitions, according to our theory, while not stifling achievement-motivated behavior. Thus, while our model argues that making changes in any of the three factors (i.e., perfectionism, body dissatisfaction, and low self-esteem) should reduce the risk of bulimic symptoms, it seems clear that not all factors are equally defensible as targets for modification in intervention and prevention. Modification of some factors (e.g., perfectionism) may have undesirable “side effects” in some contexts.

Theory and Intervention: A Reciprocal Relationship

While this paper has focused on how a theory-driven understanding of bulimic symptoms can contribute to therapeutic choices for points of intervention and prevention, the relationship between theory and intervention is not just unidirectional. The therapy and prevention settings provide an arena for testing and potentially modifying theory. That is, in therapy and prevention, powerful tests of theory can be made by manipulating hypothesized factors and seeing if the manipulation results in the predicted outcomes. For example, a therapeutic manipulation of self-esteem (i.e., increased self-esteem) would, according to our theory, be associated with an outcome of reduced risk for bulimic symptoms. This, and the hypotheses about perfectionism and body dissatisfaction, can be tested in the context of cognitive-behavioral and interpersonal therapeutic and preventive approaches.

1 We would like to stress that we are not advocating or holding up as a standard to be achieved the specific outcome of bodybuilding. Rather, we ask that readers focus on the logic of how, in a real-life example, different combinations of perfectionism, self-efficacy, and unmet standards might produce different outcomes.
References


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