Role of body dissatisfaction in the onset and maintenance of eating pathology
A synthesis of research findings

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Abstract

Objective: Recent findings implicate body dissatisfaction in the development and maintenance of eating pathology. This paper reviews theory and empirical findings regarding the putative origins and consequences of body dissatisfaction because recent findings have not been synthesized or critically evaluated and because these findings have key etiologic and prevention implications. Methods: A computer-assisted literature review was conducted to locate relevant prospective and experimental studies. Results: There is evidence that perceived pressure to be thin, thin-ideal internalization and elevated body mass, but not early menarche, increase the risk for subsequent body dissatisfaction. There is also consistent support for the assertion that body dissatisfaction is a risk factor for eating pathology and that this relation is mediated by increases in dieting and negative affect. Conclusions: This review provides support for the claim that sociocultural processes foster body dissatisfaction, which in turn increases the risk for bulimic pathology, and suggests that prevention and treatment interventions might be enhanced by focusing greater attention on body image disturbances.

Keywords: Body dissatisfaction; Body image; Bulimia nervosa; Eating pathology

Introduction

Eating disorders are one of the most common psychiatric problems faced by females and are characterized by chronicity and high rates of relapse [1–3]. Anorexia nervosa is characterized by emaciation, fear of becoming fat, disturbed perception of body shape, undue influence of shape on self-evaluation, denial of the seriousness of low body weight and amenorrhea (for females). Bulimia nervosa is marked by uncontrollable binge eating, compensatory behavior to prevent weight gain (e.g., vomiting) and undue influence of shape on self-evaluation. Eating disorders are marked by medical complications, psychosocial impairment and comorbid psychopathology, and have the highest levels of treatment seeking, inpatient hospitalization, suicide attempts and mortality of common psychiatric syndromes [4,5]. Furthermore, eating pathology increases the risk for onset of obesity, depression and substance abuse [6–8]. Accordingly, it is important to elucidate the processes that result in the onset and maintenance of eating pathology so that optimally effective preventive and treatment interventions can be developed.

One prominent risk and maintenance factor that is emerging from recent research is body dissatisfaction [9]. Body dissatisfaction refers to negative subjective evaluations of one’s physical body, such as figure, weight, stomach and hips. Body dissatisfaction should be distinguished from body image distortions wherein the individual perceives their body to be significantly larger than it really is, which is a symptom of anorexia nervosa [10]. Body dissatisfaction should also be differentiated from the over-emphasis placed on weight and shape in determining self-worth, which is a symptom of both anorexia and bulimia nervosa [10].

Although there has been a burgeoning of longitudinal and experimental studies on the apparent precipitants and consequences of body dissatisfaction, this literature has not been synthesized or critically reviewed recently. A review of this nature is currently needed because it would serve to communicate these recent findings to researchers and practitioners. This is particularly important because there seems
to be a tendency for these groups to sometimes uncritically accept the importance of hypothesized risk factors despite a lack of rigorous empirical support (e.g., perfectionism). In addition, findings from this literature have the potential to help improve the effectiveness of prevention and treatment interventions for eating pathology—something that is of vital importance given that the vast majority of prevention programs have failed to produce reductions in eating pathology [11] and that the treatments of choice only result in lasting symptom remission for a small minority of individuals [12]. Finally, the importance of understanding the risk factors for body dissatisfaction is underscored by the fact this disturbance afflicts a substantial proportion of adolescent and young adult women and is associated with emotional distress, appearance rumination and unnecessary cosmetic surgery [9,13]. Accordingly, the aims of this review are to (a) explicate the theoretical accounts concerning the putative origins and consequences of body dissatisfaction, (b) summarize and synthesize extant empirical findings, (c) note conceptual and methodological limitations of this literature, (d) review prevention and treatment implications and (e) offer suggestions regarding potential directions for future research.

This review was confined to prospective and experimental studies because it is not possible to differentiate a precursor from a consequence of body dissatisfaction with cross-sectional data. Retrospective studies were not included because this design does not permit a demonstration of temporal precedence and retrospective reports have been found to be inaccurate [14]. Only studies that tested whether independent variables predicted subsequent change in dependent variables were included. Studies that simply correlated independent variables with subsequent dependent variables without controlling for initial levels of the dependent variable were not included because this type of analysis does not establish temporal precedence. It should be noted that numerous studies were excluded from this review because the authors did not analyze their data in a way that established temporal precedence. Finally, only completely independent studies are cited for any particular point. When more than one published report examined a particular relation in the same data set, the more methodologically rigorous report was cited (e.g., the one with the longer follow-up).

Several procedures were used to retrieve published and unpublished articles for this review. First, a computer literature search was performed on PsychInfo and MedLine for the years 1980–2001 using the following key words: prospective, longitudinal, experiment, body dissatisfaction, body image disturbance, eating disorder, eating pathology, anorexia, anorexic, bulimia, bulimic and binge eating. The first author, a research assistant, and a professional librarian performed independent searches to increase the likelihood that all relevant articles would be retrieved. The first author reviewed the products of all three searchers to identify pertinent articles. Secondly, the tables of content for journals that commonly publish articles in this area were reviewed. Thirdly, the reference sections of all identified articles, past reviews and books in this area were examined.

Theoretical accounts of the risk factors for body dissatisfaction

Body dissatisfaction is thought to arise primarily from sociocultural pressures to be thin and physical deviation from the current thin-ideal espoused for women in Western culture [9,15,16]. Fig. 1 presents a conceptual model of the ostensive precursors and consequences of body dissatisfaction that guided this review. Sociocultural pressure to be thin emanates from a wide number of sources, including the mass media, parents, siblings, peers and dating partners.

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![Graphical depiction of the putative precursors and consequences of body dissatisfaction.](image-url)
These pressures to be thin take a variety of forms, ranging from glorification of ultra-slender fashion models to direct messages that one should lose weight (e.g., weight-related teasing) to more indirect pressures to conform to the current thin-ideal espoused for women (e.g., a friend’s vocalized obsessions about weight and appearance). Persistent messages that one is not thin enough putatively result in dissatisfaction with one’s physical appearance [9]. Heightened internalization of the current thin-ideal espoused for females and the belief that achieving thinness will result in a multitude of positive social benefits, such as acceptance and academic success, is also thought to promote body dissatisfaction [9,17,18]. Theoretically, the relentless pursuit of an ultra-slender body that is virtually unattainable promotes dissatisfaction with one’s physical appearance.

Elevated adiposity is also theorized to promote body dissatisfaction because the current beauty-ideal for females favors an ultra-thin figure [19,20]. Thus, this theory suggests that the greater the degree of deviation from the current thin-ideal, the greater the ensuing body dissatisfaction. Other theorists have posited that early pubertal development fosters body dissatisfaction because the marked increase in adipose tissue that accompanies puberty moves early maturing girls away from the current thin-beauty-ideal [20,21]. This increase in adipose tissue is thought to make early menarche particularly stressful because it is developmentally deviant, in that it occurs before most girls’ puberty-related weight gain.

**Theoretical accounts of the consequences of body dissatisfaction**

Body dissatisfaction, in turn, is thought to increase the risk for eating pathology through two central mechanisms. The most widely accepted account is that body dissatisfaction results in elevated dieting, which in turn increases the risk for onset and maintenance of anorexic and bulimic pathology [9,22–27]. Body dissatisfaction putatively leads to dieting because of the commonly accepted belief that this is an effective weight control technique. This dieting in turn may spiral into anorexia nervosa if weight loss efforts are met with success and if weight loss is reinforced by the responses of others in the immediate social environment (e.g., peers and parents). In contrast, this dieting might place individuals at risk for onset and maintenance of binge eating and the bulimic syndrome. Theoretically, some individuals may binge eat to directly counter the effects of caloric deprivation. Dieting might also promote binge eating because violating strict dietary rules can result in disinhibited eating (the abstinence-violation effect). Moreover, dieting entails a shift from a reliance on physiological to cognitive control over eating behaviors, which leaves the individual vulnerable to disinhibited eating when these cognitive processes are disrupted (e.g., because of intense emotions).

In addition to the putative dietary pathway from body dissatisfaction to eating pathology, theorists have also suggested there may be a negative affect regulation pathway [27–29]. Specifically, body dissatisfaction is thought to contribute to negative affect because appearance is a central evaluative dimension for girls and women in Western cultures. Elevated negative affect in turn is thought to increase the risk for binge eating because some individuals may overeat in an effort to provide comfort and distraction from adverse emotions. Individuals might also use radical compensatory behaviors, such as vomiting, to reduce anxiety about impending weight gain consequent to overeating or because some individuals believe that purging serves as an emotional catharsis.

**Empirical findings for the putative risk factors for body dissatisfaction**

An increasing number of prospective and empirical studies have examined the putative risk factors for body dissatisfaction. First, several independent studies have found that elevated perceived pressure to be thin predicts subsequent increases in body dissatisfaction [19,27,30,31], although one study with a small sample size did not observe this effect [32]. Second, numerous experiments have found that exposure to media-portrayed thin-ideal images results in acute increases in body dissatisfaction (e.g., Refs. [33–37]), but isolated studies have generated null effects [38]. Interestingly, some experiments observed stronger effects for individuals with initial body image concerns [39–42], but other studies did not find that body dissatisfaction moderated these effects [43,44]. One randomized experiment indicated that social pressure to be thin from peers resulted in increased body dissatisfaction [45]. Third, studies have also found that elevated thin-ideal internalization increases the risk for subsequent increases in body dissatisfaction [27,31]. Furthermore, experimental reductions in thin-ideal internalization have been found to result in significant decreases in body dissatisfaction [46,47]. In addition, several studies have found that elevated body mass predicts subsequent increases in body dissatisfaction [19,30,31,48], although one study with a small sample size did not replicate this effect [32]. Somewhat surprisingly though, early menarche has not emerged as a significant predictor for subsequent increases in body dissatisfaction [31,49], suggesting that early pubertal development may not increase the risk for body image disturbances.

In sum, there was relatively consistent support in the methodologically stronger studies that elevated perceived pressure to be thin, thin-ideal internalization and body mass are risk factors for subsequent increases in body dissatisfaction. In contrast, research has not provided support for the suggestion that early menarche predicts increases in body dissatisfaction over time.
Empirical findings for the putative consequences of body dissatisfaction

There is also mounting evidence that elevated body dissatisfaction in turn increases the risk for a variety of adverse outcomes, including eating pathology. Independent studies have found that initial elevations in body dissatisfaction predict subsequent increases in overall eating disorder symptoms [20] and bulimic symptoms [27,50]. Other studies have found that initial elevations in body dissatisfaction increase the risk for subsequent onset of bulimic symptoms [51–53] and of subthreshold/threshold diagnoses of bulimia nervosa [54,55]. Although there have been isolated studies that did not replicate these effects [56,57], each possessed certain statistical and methodological shortcomings that explain the null findings. Specifically, the anomalous finding from the Leon et al. [56] study appears to have resulted because 35 independent variables were entered into the model, which causes inflated standard errors and unstable parameter estimates. The fact that other parameter estimates from these analyses were at odds (i.e., statistically significant in the opposite direction) with parameter estimates from other risk factor studies [55] provides additional evidence that these findings should be viewed with caution. The nonsignificant effects from Keel and associates appear to have resulted because of insufficient statistical power, in that this study only involved 55 participants (compared to an average of 1203 participants for the studies reporting significant relations between initial body dissatisfaction and subsequent eating pathology). There is also experimental evidence that interventions that reduce body dissatisfaction result in subsequent decreases in bulimic pathology [58,59]. A recent meta-analytic summary found that the average prospective effect for body dissatisfaction in the prediction of bulimic pathology was \( r = .13 \) [60]. This is likely a conservative estimate because this is a weighted average and the studies that received the highest weights (because they had the largest samples sizes) tended to produce smaller effect sizes (apparently because they used weaker methodology, such as use of questionnaires rather than interviews to assess constructs). Regardless, there is reasonably consistent prospective and experimental support for the assertion that body dissatisfaction is a risk factor for bulimic pathology.

There is also support for the contention that body dissatisfaction gives rise to dieting, which in turn increases the risk for eating pathology. First, elevations in body dissatisfaction have been found to predict subsequent increased dieting in three independent studies [8,27,61]. Second, elevations in dieting have been found to predict subsequent increases in bulimic symptoms [27] and eating pathology [8], onset of bulimic symptoms [51,52,54,55], and onset of threshold and subthreshold eating disorders [62,63]. In direct support of the assertion that dieting mediates the relation between initial body dissatisfaction and bulimic pathology, one study found that a significant effect from initial body dissatisfaction to increases in bulimic symptoms became nonsignificant when the effects of change in dieting were statistically controlled [27].

Emerging findings also provide support for the suggestion that negative affect may partially mediate the relation between body dissatisfaction and bulimic pathology. First, five independent studies have found that initial elevations in body dissatisfaction predicted increases in negative affect [8,18,64] and onset of depression [7,66]. Second, there is evidence that initial negative affect prospectively predicted increases in bulimic symptoms [27] and onset of bulimic symptoms [51,53,55]. However, a number of other studies have found nonsignificant relations between negative affect and subsequent eating pathology [8,48,56,57,65,66,67]. Although some of these latter studies suffered from methodological limitations (e.g., use of small sample sizes and a focus on developmentally questionable periods), it simply appears that the effect for negative affect is smaller. Indeed, the average effect of negative affect on bulimic pathology was weaker than that for dieting \((r = .08 \text{ vs. } r = .15, \text{respectively)}\); Stice, 2001b), which may partially explain why this effect is less consistently observed. Nonetheless, there is experimental evidence that interventions that reduce body dissatisfaction result in decreased negative affect [58,59]. In direct support of the negative affect mediational hypothesis, a significant relation between initial body dissatisfaction and subsequent increases in bulimic symptoms became nonsignificant when the effects of change in negative affect was statistically controlled [27]. Another interesting possible explanation for the mixed support from prospective studies is that negative affect may only result in eating pathology for a subset of individuals. That is, perhaps most participants develop eating pathology via a pathway involving body dissatisfaction and dieting, but a smaller subset develop eating pathology via an affect regulation route. It would be useful for future research to explore this possibility in greater detail.

Although numerous studies have tested whether body dissatisfaction is a risk factor for the subsequent development of eating pathology, far fewer studies have tested whether body dissatisfaction plays a role in the maintenance of eating disorder symptoms. The distinction between risk and maintenance factors is important, because the former are germane to the design of prevention programs, but the latter are relevant to the design of treatment interventions. Thus, a clear understanding of the maintenance factors for bulimic pathology is needed to design the optimally effective treatment programs.

There is evidence that initial elevations in body dissatisfaction attenuate the effects of cognitive behavioral therapy for bulimia nervosa [68]—the current treatment of choice for this disorder. However, this finding has not replicated in other investigations [69,70]. Regardless, testing whether elevations in a factor impede the effects of a treatment program is not isomorphic with testing whether elevations in this factor predict persistence of pathology in a
community sample of individuals afflicted with the disorder. Moreover, there is considerable evidence that most individuals with bulimia nervosa do not seek treatment [4] and that those who do seek treatment evidence greater psychiatric disturbances [71].

We were able to locate only two studies that examined the predictors of eating pathology persistence with data from nonclinical samples. One found that initial elevations in body dissatisfaction predicted persistence of bulimic symptoms, versus remission, over time [52]. Although the second study did not directly assess body dissatisfaction, it did find that weight and shape concerns predicted an increased risk for persistence of bulimic symptoms among individuals who met diagnostic criteria for bulimia nervosa at baseline [72]. Thus, these preliminary findings provide support for the assertion that body dissatisfaction may play an important role in the maintenance of bulimic pathology.

**Conceptual limitations of this literature**

It is important to consider the conceptual and methodological limitations of this literature when interpreting the findings. Perhaps the most serious conceptual shortcoming of this body of research is that few theorists have considered the possibility that some third-variable explains the relation of body dissatisfaction to body mass, pressure to be thin, thin-ideal internalization, dieting, negative affect and eating pathology. Because most of the studies that have been conducted to test the above theoretical accounts were not experimental, the possibility that some variable not included in the models accounts for the observed interrelations among the variables cannot be ruled out. For example, it may be that a general tendency towards caloric overconsumption results in elevated body mass, pressure to be thin, body dissatisfaction, dieting efforts, and eventual onset of clinically significant eating pathology. Accordingly, it would be useful if more careful theoretical consideration was given to the possibility that some third-variable could explain the relations of body dissatisfaction to these putative precursors and sequela.

A second conceptual shortcoming of the literature is that theorists have paid relatively little attention to the possibility that body dissatisfaction is reciprocally related to dieting, negative affect, and bulimic pathology (cf. Refs. [73,74]). It seems plausible that episodes of binge eating might lead an individual to feel more negatively about his or her body. Similarly, negative affect may be associated with a negative information processing bias that results in the perception that one’s current body shape is further from one’s ideal body shape [74].

A third conceptual limitation is that there has been relatively little theoretical work concerning factors that may potentiate or mitigate the relations of body dissatisfaction to dieting, negative affect and bulimic pathology. For instance, elevated self-esteem in a domain that is independent from appearance, such as academic or artistic pursuits, may render individuals more resilient to the adverse effects of sociocultural pressure to be thin. Similarly, the relation between thin-ideal internalization and body dissatisfaction may only occur for individuals who deviate physically from this ideal.

**Methodological limitations of this literature**

It is also important to consider the methodological limitations of this body of literature. Most importantly, prospective designs have been under-utilized in this area of research. Because it is not possible to differentiate a precursor from a consequence of body dissatisfaction with cross-sectional data, these types of studies do not permit inferences regarding the nature of the observed relations and therefore do little to advance science. Prospective studies permit greater inferential confidence regarding the putative direction of effects between variables.

A second major methodological limitation is that there has been an under-utilization of randomized experiments. Despite the fact that prospective studies are an improvement over cross-sectional studies, they still do not permit investigators to rule out third-variable explanations. Accordingly, greater use should be made of experiments that manipulate suspected causes of body dissatisfaction. Similarly, experiments that manipulate body dissatisfaction should be utilized to more definitively establish the adverse consequences of body image disturbance. There are examples of laboratory-based experiments that have successfully manipulated social pressure to be thin and documented the adverse consequences on body dissatisfaction (e.g., Ref. [41]). It is also possible to use randomized trial methodology to determine the effects of reducing body dissatisfaction on suspected consequences (e.g., Ref. [59]).

Third, many investigations used unrepresentative samples, such as college students or patients from a clinical setting. Although it is more convenient to recruit participants from these sources, the generalizability of the findings is constrained. Accordingly, greater use should be made of community-recruited samples in this area of research. Fourth, longitudinal studies have sometimes examined inappropriate developmental periods. For example, several studies investigating etiologic theories of the development of bulimic pathology have examined college students — this is problematic because this population is beyond the period during which these disturbances typically emerge. In support of this contention, a recent meta-analysis confirmed that the effects of risk factors are significantly weaker for adult samples relative to adolescent samples [60].

Finally, some researchers have used measures with questionable reliability or validity. One example is the Restraint Scale [75], which has been found to be uncorrelated with actual caloric intake [76] and to predict increases
in weight [6]. The fact that the Restraint Scale lacks concurrent and predictive validity indicates that this measure may not tap dietary restraint.

**Prevention and treatment implications**

This body of literature has several implications for prevention efforts aimed at body image disturbances. First, findings suggest that interventions, which reduce sociocultural pressure to be thin and renders individuals more resilient to these pressures, may prove useful in reducing body dissatisfaction. Consistent with this possibility, there is emerging evidence that brief interventions that specifically help girls and women become more critical consumers of the media produce improvements in body satisfaction (e.g., Ref. [77]) and buffer them from the adverse effects of exposure to thin-ideal images [36]. However, multicomponent prevention programs that include such a “media literacy” component have produced a more modest impact on body image disturbances (e.g., Ref. [78]). This pattern of findings might suggest that these multicomponent interventions contain programming that attenuate the effects of media literacy information or that the modules on media literacy do not approximate those used in the stand-alone interventions that exclusively focus on media literacy. It is also possible that media literacy programs simply produce small effects on body dissatisfaction that are inconsistently observed. Second, results imply that interventions that result in decreased subscription to the thin-ideal should promote body satisfaction. In support of this suggestion, a dissonance-based intervention that reduces thin-ideal internalization has been found to decrease body dissatisfaction [46,47]. Third, results suggest interventions that promote healthy weight management skills (e.g., regular moderate exercise and reduced fat consumption) should decrease body dissatisfaction by reducing the rates of obesity. In line with this possibility, two preliminary trials suggest that a healthy lifestyle intervention resulted in subsequent improvements in body satisfaction [46,79]. Similarly, weight loss treatment programs that promote reductions in caloric intake and regular moderate exercise have been found to result in increased body satisfaction [80,81]. Again, however, multicomponent interventions that have included a focus on healthy weight management (e.g., Ref. [82]) have not produced reductions in body dissatisfaction. This pattern of findings may suggest that the multicomponent interventions contained programming that mitigated the effects of the healthy weight focus. More generally, there is a chance that other differences between the interventions might explain the inconsistent findings, such as the fact that the former interventions were targeted in focus and delivered in an interactive group therapy format, whereas the latter was universal in focus and represented a psychoeducational didactic presentation.

The findings reviewed here also have implications for eating disorder prevention programs. Specifically, they suggest that eating disorder prevention programs might be strengthened by the inclusion of a module that decreases body dissatisfaction. Fortunately, cognitive behavioral interventions have been developed that have been shown to effectively achieve this aim (e.g., Refs. [58,59]). Again, however, multicomponent interventions that include a module focused on body dissatisfaction reduction have not been shown to reduce eating pathology (e.g., Ref. [83]), suggesting that such interventions may contain programming that are working at cross-purposes or that a universal psychoeducational format is less effective than a targeted group therapy format. A less direct implication of this review is that it might also be useful to include modules in eating disorder prevention interventions that reduce unhealthy dietary restriction and negative affect, as both of these factors appear to increase the risk for subsequent onset of bulimic pathology. Unfortunately, to our knowledge, no prevention trial has specifically targeted these two risk factors. And, as we have seen above, it is difficult to unambiguously interpret the null findings from multicomponent universal programs that have included modules that might address one or both of these constructs (e.g., Ref. [82]).

The recurrent evidence that selected prevention interventions focusing on one risk factor produce positive outcomes, whereas universal programs focusing on a plethora of putative risk factors produce less desirable outcomes has important implications more generally. As noted previously, this might be interpreted as providing evidence that selected prevention interventions are more effective than are universal interventions. This pattern of findings may have resulted because the low risk individuals included in the universal interventions have no room to improve (i.e., a floor effect). There is also a possibility that the mode of intervention delivery is important, as the interventions that used a group format appeared to produce more positive effects than those that were delivered according to a didactic psychoeducational format. Also as noted above, there is a possibility that certain modules of the multicomponent interventions are working at cross-purposes. Future research should carefully examine each of these possible explanations for the inconsistent prevention results.

Because there were so few studies testing whether body dissatisfaction predicted maintenance of bulimic pathology, the treatment implications from this review are more tentative. Nonetheless, available data suggest that treatment interventions for bulimia nervosa might be improved by including more of an explicit focus on reducing body dissatisfaction. Although cognitive behavior therapy for bulimia nervosa focuses on reducing overvaluation of shape and weight in determining self-worth, this is somewhat different than directly targeting body dissatisfaction with cognitive–behavioral techniques. Fortunately, the intervention developed by Cash, Rosen and their colleagues seems well-suited for this task [59,84].
Directions for future research

As suggested above, greater use should be made of prospective and experimental studies in the investigation of the precursors and consequences of body dissatisfaction because this would permit greater inferential confidence. Again, randomized prevention trials that target one specific factor appear to offer a powerful way of experimentally investigating the hypothesized relations. Second, it would be useful to devote greater research attention to the factors that mitigate or potentiate the predictors and consequences of body dissatisfaction in these prospective and experimental studies. In a related vein, research should explore the possibility of qualitatively different routes to body dissatisfaction and from body dissatisfaction to bulimic pathology (e.g., a dieting pathway versus an affect regulation pathway). Exploratory data analytic techniques, such as classification tree analysis, may prove particularly useful for addressing these questions. Finally, more research should be directed at investigating whether body dissatisfaction plays a role in the maintenance of bulimic pathology.

Conclusions

In closing, this review found that there was prospective and experimental support for the assertion that perceived pressure to be thin, thin-ideal internalization and elevated body mass increase the risk for subsequent body dissatisfaction. However, there was no support for the hypothesis that early menarche is a risk factor for body dissatisfaction. There was also prospective and experimental support for the suggestion that body dissatisfaction increases the risk for subsequent eating pathology and that this relation is mediated by increases in dieting and negative affect. These findings are consonant with the general notion that sociocultural processes foster body dissatisfaction, which in turn increases the risk for eating pathology. These results suggest that prevention and treatment interventions might be enhanced by focusing greater attention on body dissatisfaction, although other aspects of program delivery appear to be quite important (e.g., use of universal versus selected interventions). Additional prospective and experimental studies are needed to more firmly establish the nature of these relations and to elucidate the factors that amplify and mitigate the precursors and consequences of body image disturbances. Thus, although impressive advances have been made regarding the precursors and consequences of body dissatisfaction, many questions remain unanswered regarding this pervasive problem.

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References

[18] Stice E, Bearman SK. Body image and eating disturbances prospect-


[40] Stice E, Maxfield J, Wells T. Adverse effects of social pressure to be thin on young women: an experimental investigation of the effects of “fat talk”. Int J Eat Disord, in press.


[57] Patton GC, Johnson-Sabine E, Wood K, Mann AH, Wakeling A. Abnormal eating attitudes in London schoolgirls—a prospective epi-


