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Test of Stice's dual pathway model: Dietary restraint and negative affect as mediators of bulimic behavior

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Abstract

The present study was designed to test whether dietary restraint and negative affect mediate the relationship between body dissatisfaction and bulimic behavior. Four hundred and twelve female students completed questionnaires which measured body dissatisfaction, restrained eating, negative affect and bulimic behavior. The results indicated that dietary restraint and negative affect partially mediated the relationship between body dissatisfaction and bulimic behaviors. The findings are discussed in light of previous research which suggests that restraint needs to be viewed as a multidimensional construct. Longitudinal studies are now needed to investigate the causal and possible bidirectional nature of the interrelationships in the model tested here.

1. Introduction

In recent years, a large number of researchers have been focussing on the development of bulimia nervosa and bulimic eating patterns (Heatherton and Baumeister, 1991; Striegel-Moore, 1993; Beebe, 1994; Stice, 1994). One major variable which has been identified as a significant factor in the development of bulimic symptoms is body dissatisfaction (Gleaves et al., 1993; Killen et al., 1994; Stice, 1994; Thompson et al., 1995; van Strien, 1996). Stice (1994) recently proposed a model that identifies two ways in which body dissatisfaction may lead to bulimic behavior. Firstly, body dissatisfaction is viewed as leading to dietary restraint which, in turn, is viewed as leading to binge-eating and bulimic eating patterns. It is argued that body dissatisfaction leads to dietary restraint because of the belief that restrained eating will produce weight-loss and thinness (Cash and Henry, 1995; McCarthy, 1990; Stice, 1994). Several studies

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have provided evidence supporting the relationship between body dissatisfaction and dietary restraint (Hawkins and Clement, 1984; van Strien, 1989; Tiggemann, 1994; Thompson et al., 1995). Extensive cross-sectional and longitudinal research has also supported the view that dietary restraint underlies the eating behavior of many eating disordered patients, in particular, the syndrome of bulimia nervosa and binge eating disorder (Gleaves et al., 1993; Brody et al., 1994). Similarly, dietary restraint has been shown to account for a large amount of the variance in binge eating and bulimic behavior in nonclinical samples (Polivy and Herman, 1985; Ruderman, 1985; Greeno and Wing, 1994; Thompson et al., 1995).

Inconsistent findings within the eating literature have, however, led some researchers to question the hypothesized causal link between dietary restraint and overeating (Charnock, 1989; Cooper and Charnock, 1990; van Strien, 1996). In response to the inconsistencies, it has been proposed that there are different forms of dietary restraint (Heatherton et al., 1988; Lowe, 1993; Westenhoefer et al., 1994; Stice et al., 1997). The Restraint Scale (Herman and Mack, 1975), which contains references to weight fluctuation and overeating, has been described as a measure of chronic and unsuccessful dieting (Heatherton et al., 1988; Lowe, 1993; Greeno and Wing, 1994). In contrast, more recent measures of restraint such as the Three Factor Eating Questionnaire (TFEQ-R; Stunkard and Messick, 1985) and the Dutch Eating Behavior Questionnaire (DEBQ-R; van Strien et al., 1986) differ from the Restraint Scale in that they mostly exclude references to weight fluctuation and describe specific cognitive and behavioral strategies to restrict food intake. These scales have often been described as measures of current and successful dieting (Allison et al., 1992; Lowe, 1993; Williamson et al., 1995).

Although dietary restraint, in particular, chronic dieting as measured by the Herman and Mack (1975) Restraint Scale, has been found to play a role in the aetiology of bulimic behavior, many restrained eaters do not develop symptoms of eating disorders (Brownell and Rodin, 1994; Pirke and Laessle, 1993). In addition to dietary restraint, another pathway which may mediate the relationship between body dissatisfaction and bulimic behavior has been highlighted by Stice (1994). This second pathway is negative affect. Stice (1994 (see also McCarthy, 1990) has argued that body dissatisfaction coupled with a belief that being slim is highly important to self-worth contributes to negative affect which ultimately leads to binge eating. Although debated, one of the current views is that binge eating is used to regulate and ameliorate negative affect (Beebe, 1994; Stice, 1994). However, the bingeing may lead to further increases in negative affect (Beebe, 1994; Stice, 1994). There is much correlational research which supports the relationship between body dissatisfaction and negative affect (Fabian and Thompson, 1989; Cash and Hick, 1990; Gleaves et al., 1993; Stice and Shaw, 1994); and the relationship between negative affect and bulimic behaviors (Laessle et al., 1989; Stice and Shaw, 1994; Leal et al., 1995). However, the mechanisms underlying these relationships are still poorly understood.

The present study was designed to specifically examine the mediator effects of dietary restraint and negative affect in the relationship between body dissatisfaction and bulimic behaviors, as proposed by Stice (1994). In order to comprehensively assess dietary restraint, both Herman and Mack's Restraint Scale and the TFEQ-R were included. The study focussed on female high school students and university students as this population is at high risk of developing bulimic behavioral problems. The great majority of individuals with bulimia are