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Disordered eating, perfectionism, and food rules

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ABSTRACT

Clinically significant trait perfectionism is often characteristic of individuals exhibiting symptoms of eating disorders. The present study reports on a measure developed to assess the use of food rules and evaluates the hypothesis that adherence to food rules may be one mechanism through which trait perfectionism exacerbates risk for developing eating disorder symptoms. Forty-eight female college students completed a battery of questionnaires, and multiple regression analyses were used to test a mediational model. Results indicated that adherence to food rules mediated the relationship between self-oriented perfectionism and three indices of disordered eating in this sample. This relationship was specific to self-oriented perfectionism and did not hold for other-oriented or socially prescribed perfectionism. These findings may have implications for designing early interventions for disordered eating and may be useful in tailoring treatment for individuals with disordered eating who also report high levels of perfectionism.

1. Introduction

The identification of factors that contribute to the development and maintenance of eating disorders has been the focus of significant research effort in recent years. The etiology of anorexia nervosa (AN), bulimia nervosa (BN), and eating disorder not otherwise specified (EDNOS) appears to involve a combination of genetic, familial, personality, developmental, and socio-cultural influences (Klein & Walsh, 2003). A strong relationship has been found between trait perfectionism and disordered eating, but potential mediating variables affecting this relationship remain largely unknown (Bardone-Cone et al., 2007). One hypothesized mechanism at play in this relationship is adherence to rules regarding what, when, and how one must eat or not eat. Perfectionistic traits may lead individuals to adhere rigidly to such "food rules," which, in turn, may increase vulnerability to developing eating disorder symptoms. This study aims to explore the role of food rules in understanding the relationship between perfectionism and disordered eating attitudes and behaviors.

The construct of perfectionism involves placing excessive emphasis on organization and preciseness, holding idealistic personal expectations, critically self-evaluating when expectations are not met, and doubting the quality of personal accomplishments (Hewitt & Flett, 1991). Hewitt and colleagues (Hewitt, Flett, Turnbull-Donovan, & Mikail, 1991) propose that perfectionism has three dimensions: self-oriented, other-oriented, and socially prescribed. Self-oriented perfectionism involves critical self-scrutiny and holding to unrealistic, self-imposed personal standards, whereas other-oriented and socially prescribed perfectionism are based on a need to achieve high standards imposed by other people or by society at large (Hewitt, Flett, Besser, Sherry, & McGee, 2003). While some degree of adherence to personal and socially constructed standards of behavior is adaptive and healthy, perfectionistic tendencies become clinically relevant when high standards are pursued despite significant adverse consequences (Shafran, Cooper, & Fairburn, 2002).

Perfectionism has been identified as both a risk factor and a maintaining variable for disordered eating symptoms. In a prospective study, individuals with severe anorexia nervosa who scored highly on perfectionism at pretest had poorer prognoses, as indicated by assessments 5–10 years later (Bizeul, Sadowsky, & Rigaud, 2001). In a correlational study designed to investigate the relationship between eating disorders and both adaptive and maladaptive dimensions of perfectionism, women in treatment for an eating disorder scored significantly higher than healthy controls on the maladaptive perfectionism factor (Ashby, Kottman, & Schoen, 1998). More recent findings suggest that this difference may be specific to self-oriented perfectionism (Castro-Fornieles et al., 2007); individuals with eating disorders appear to hold themselves to exceptionally high personal standards but may be less concerned about living up to socially prescribed ideals.

In Fairburn and colleagues' influential transdiagnostic cognitive–behavioral theory of the development and maintenance of eating disorders (Fairburn, Cooper, & Shafran, 2003), over-evaluation of eating, weight, and shape interacts with perfectionistic standards for achievement and self-control to drive the development and maintenance of eating disorder symptoms. Fairburn (Fairburn, 2008) recently introduced a "clinical perfectionism" module into standard cognitive–behavioral therapy for eating disorders, which specifically addresses this dysfunctional scheme for self-evaluation.

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While the relationship between perfectionism and disordered eating behaviors is well-supported by the existing literature, the specific mechanisms by which perfectionism exerts its influence on eating pathology have yet to be identified. The pursuit of unrealistic standards regarding eating, weight, and shape may encourage the development of overly rigid food rules. To date, little empirical research has been conducted on the development of and adherence to food rules among individuals with eating disorders. The following section briefly reviews research related to food rules and disordered eating and suggests that food rules may mediate the relationship between perfectionism and eating disorder symptoms.

1.1. Food rules

Many individuals with AN, BN, and subclinical forms of disordered eating subscribe to personal food rules that can be quite rigid and restrictive (Eiber, Mirabel-Sarron, & Urdapilleta, 2005). For some, it is a matter of taking generally sound recommendations for healthy eating to the extreme. Others have received unhealthy messages about food in the past and experience greater distortion in their thoughts about food as their disorder progresses. Many individuals with eating concerns avoid foods that either predispose them to binge eating or they consider unhealthy (Klein & Walsh, 2003). By denying themselves certain foods and only eating those foods considered to be safe, the food intake of individuals with eating concerns can be very restrictive and lacking in variety and nutrients, which may lead to a state of physiological deprivation and heightened risk for binge eating (Eiber et al., 2005; Mathes, Brownley, Mo, & Bulik, 2009). Food rules specifically, and rigid thought patterns about food more generally, are associated with heightened emotional responsiveness and cognitive disruption, including excessive focusing on food as well as eating in excess, which further compound eating concerns (Polivy, 1996).

Self-imposed food rules may increase preoccupation with "forbidden" foods, setting the stage for more rigid adherence to these rules in an effort to maintain self-control and increasing the likelihood of binge eating when the temptation to consume "off-limits" foods becomes too strong (Lingswiler, Crowther, & Stephens, 1989; Mann & Ward, 2001). Mann and Ward (2001) assigned participants to one of three groups; the first group was prohibited from eating a target food, the second group was encouraged to avoid it, and the third group was given no instruction related to the target food. The researchers found that in an absence of prohibition on eating, individuals' thoughts about a food decreased over time. However, when dietary restraint from an appealing food was enforced or chosen, individuals experienced increased preoccupation with the forbidden foods. Such preoccupation may strengthen commitment to food rules as the forbidden food becomes more tempting and salient for the individual, who may feel a need to exert more control over his or her behavior to resist consuming the off-limits food.

To date, little research has evaluated the degree to which adherence to food rules may contribute to disordered eating. Additionally, the current literature is limited by a lack of validated measures specifically assessing adherence to food rules. This study aims to fill both voids by testing the psychometric properties of a new Food Rules Measure (FRM) in a sample of healthy female undergraduates and exploring the relationship between perfectionism, adherence to food rules, and disordered eating in this sample. Adherence to food rules is hypothesized to mediate the relationship between perfectionism and disordered eating. Support for this hypothesis would suggest that specific interventions targeting distorted cognitions about and commitment to following rigid food rules might be particularly efficacious for treating eating pathology in highly perfectionistic individuals.

2. Methods

The current investigation was part of a larger study investigating the role of self- and other-compassion in body dissatisfaction (Rudat, 2010). The specific measures used for this study (described below) were included among the questionnaires that were completed as a part of the parent study.

2.1. Participants

Forty-eight female undergraduate students completed the study. All students were enrolled in the Psychology Research Pool at a private university. Only participants over age 18 were enrolled in the study. The ages of participants ranged from 18 to 35 ($M = 19.2$, $SD = 2.5$). The participants were racially diverse; 66.7% identified as Caucasian, 18.8% as Asian, 8.3% as Black or African-American, 4.2% as Mixed Race or Other. Further, 10.4% of the participants identified as Hispanic or Latino. One participant did not report her race or ethnicity. This study was approved by the Emory University Institutional Review Board.

2.2. Design

The measures used for this study were included within a larger set of questionnaires that were completed at a single time point. This cross-sectional correlational design was used to provide an initial investigation of potential relationships among concurrent levels of perfectionism, eating disorder symptoms, and adherence to food rules. Other measures assessing depression, self-esteem, and self- and other-compassion were used to investigate the construct validity of the new measure of adherence to food rules that had been developed specifically to evaluate hypotheses for this study. As adherence to food rules was hypothesized to reflect attitudes and judgments about one's own eating, it was expected that the new measure would be moderately correlated with depression, self-esteem, and self-compassion but not significantly correlated with compassion towards others.

2.3. Measures

2.3.1. Food rules

Due to the lack of adequate measures to assess adherence to food rules, the authors developed a novel measure assessing the degree to which participants endorse the use of food rules. The Food Rules Measure (FRM) is a 14-item self-report measure designed to assess the content of food rules, the frequency of rule enforcement, and the predicted consequences of breaking the rule. A team of experts, including a registered dietician and two Masters-level psychologists, collaboratively generated the items for the FRM and pilot-tested the measure to ensure its clarity and coherence. FRM items are rated on a four-point scale ranging from "Always" to "Never." Lower scores indicate greater adherence to food rules. An example item from this measure is, "I feel disappointed in myself when I 'splurge' on a food I typically do not eat or avoid." Reliability and validity statistics related to the FRM are presented in the Results section.

2.3.2. Perfectionism

The Multidimensional Perfectionism Scale is a 45-item self-report measure that assesses perfectionism using seven-point Likert scales (Hewitt et al., 1991). The measure captures three domains of perfectionism: self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. Hewitt et al. (1991) found this measure to have good internal consistency (Cronbach's alpha = 0.87), test–retest reliability (0.91 and 0.86 for self-oriented and socially prescribed perfectionism, respectively), and concurrent validity.