Risk factors for maladaptive eating patterns in college women

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ABSTRACT. As the empirical literature on maladaptive eating patterns has grown, the importance of longitudinal studies in establishing causal risk factors has become apparent. The current study reports longitudinal data gathered from the first 20 months of college for female students (n=117). Eating pathology was assessed using a composite measure from the Eating Disorders Inventory. Variables examined as potential risk factors included depression, reassurance seeking, perfectionism, impulsiveness, body dissatisfaction, and stressful events. Eating symptoms were quite stable across the 20-month interval (r=0.68). Although all of the potential risk variables showed significant correlations with eating symptoms, hierarchical regressions controlling for eating symptoms at Time 1 indicated that perfectionism, impulsiveness, and body dissatisfaction failed to uniquely add to the prediction of eating symptoms at Time 2. Depression, reassurance seeking and stressful events did add to this prediction. Failure to find support for variables in a longitudinal design may be due to the age of participants and relative stability of eating symptoms. Perfectionism, and body dissatisfaction may play a causal role in developing eating symptoms at earlier ages, but do not continue to influence the course of these symptoms in late adolescence. Negative affect (depression), needing reassurance in social relationships, and having to deal with stressful events seem to be risk factors for increased eating symptoms in late adolescence.

INTRODUCTION

The extensive literature regarding eating disorders and subclinical eating pathology has lead to a fairly extensive knowledge of the correlates of eating problems. Unfortunately, the majority of these studies have been cross sectional in nature and do not support any cause and effect relationships. The current study reports on a longitudinal study of eating symptoms in a population of college women. Longitudinal data, although not conclusive about cause and effect, at least establishes the temporal precedence which is one requirement of a cause and effect relationship (1).

In this study we examined a number of potential causal variables, identified in other studies. These variables, briefly reviewed below, included: body dissatisfaction, negative affect, impulsivity, perfectionism and stress.

Body dissatisfaction
The effects of body dissatisfaction on eating symptoms may be indirect, through an increase in dieting and negative affect, as well as acting directly on eating symptoms (1). A number of longitudinal studies have found that body dissatisfaction is a risk factor for developing eating symptoms (2-6). Although there have also been studies failing to find this connection (7, 8). Reviews of this body of work have suggested that there is ample evidence that body dissatisfaction serves as a risk for developing eating pathology (9).

Negative affect
Another variable commonly identified as a risk for eating pathology is negative affect. Although there is considerable evidence of the correlation between eating symptoms and negative affect, there are relatively few longitudinal examinations of this possible causal relationship. There are several studies which support negative affect as a risk factor for eating symptoms (2, 5, 10) but the results in this area are not unanimous (1, 11). Although depression is the most common-
ly examined type of negative affect, other emotional reactions have sometimes been studied. In their 3 to 4 year longitudinal study, Leon et al., (12) found that their latent variable for negative affect, which included both measures of depression as well as ineffectiveness, predicted greater eating symptoms. Gilbert et al. (13) found that fear of negative evaluation was prospectively related to an increase in bulimic attitudes.

Negative affect has also been hypothesized to increase the development of body dissatisfaction which then, in turn, increases the risk of developing eating symptoms. Longitudinal evidence for this connection between negative affect and body dissatisfaction has been both supportive (14) and non-supportive (15).

Genetic studies (16) suggest that eating pathology and negative affect such as anxiety and depression may share a common genetic liability. Although there may also be a separate genetic component which increases the risk of the early development of eating symptoms.

**Impulsivity**

A meta-analytic review conducted by Stice (1), concluded that impulsivity is not an effective predictor of eating pathology or bulimic symptoms. However, a behavior rooted in a lack of impulse control, substance abuse, was found to be a predictor of the onset of bulimic pathology. Findings in a related study (17), indicated that bulims showed significantly more substance use than anorexics.

Several studies using behavioral measures of impulsivity have found results supportive of a connection between impulsivity and eating pathology. Nederkoorn et al. (18), found that restrained eaters responded more impulsively on a stop-signal reaction task. Similarly, Lyke et al. (19) found that in non-clinical samples, disinhibited eating is moderately correlated with attentional and motor impulsivity but has no relationship with non-planning impulsivity. Altogether, these studies suggest that a deficit in motor response inhibition may be conducive to dysfunctional eating behavior.

The operational definition of impulsivity seems to be crucial in determining empirical outcomes. This seems to be true with clinical populations as well as sub-clinical groups. Butler et al. (20) studied both self-report and behavioral measures in a clinical population, the anorexic group reported lower levels of impulsiveness but displayed impulsive behavior on a continuous performance task (CPT). This meant that more errors were present due to a faster reaction time to tasks.

Both self-report and behavioral measures of impulsivity were used in a longitudinal study in an adolescent population (21). When impulsivity was measured as a trait using traditional personality scales, these measures failed to predict the onset of eating pathology. However, when impulsivity was assessed using behavioral measures (delinquency or substance abuse), impulsivity did significantly predict the onset of eating pathology.

**Perfectionism**

Perfectionism, the desire to attain idealistic goals without failing, is widely believed to foster eating disorders, since the unyielding nature of this personality trait may promote a relentless quest for thinness (22). Much of the prior research on perfectionism and eating disorders has been inconclusive. In several studies, perfectionism seems to drive disordered eating behaviors (23, 24). Perfectionism may also lead to the development of depression and anxiety (25). Franco-Paredes et al. (26) offered a synthesis of the most current literature supporting perfectionism as a driving force behind the promotion and maintenance of eating disorders. However, none of the studies they cited were longitudinal in nature.

In contrast to supportive literature, many null findings have also been reported (27). Young, et al. (28) found that perfectionism was related to eating symptoms, but not above and beyond other variables used in the study, which included low self-esteem, depression, and perceived pressure to be thin.

Vohs (8) proposes that the inconsistency of the relationship between perfectionism and eating pathology is because perfectionism is a multifaceted construct. Additionally, Stice (1) observes that there is emerging evidence that perfectionism may interact with other risk factors to predict eating pathology. Vohs et al. (8, 30) found that the convergence of perfectionism, body dissatisfaction, and low self-esteem promoted bulimic pathology. Support for this type of interaction has been sporadic with some studies failing to find support for this model (6). The present study examines perfectionism in a longitudinal design with college-aged females.

**Stress**

This study examined eating symptoms in students just beginning a college experience. Because of the many changes and challenges facing such young adults, a measure of life events was included as an overall measure of stress. As a generalized vulnerability factor for all types of pathology, stress would be expected to play the same role with eating symptoms. Some research has made this connection between stressful life events and eating pathology (27).