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Depression, coping, hassles, and body dissatisfaction: Factors associated with disordered eating

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ABSTRACT

The objective was to explore what predicts first-year college women's disordered eating tendencies when they arrive on campus. The 215 first-year college women completed the surveys within the first 2 weeks of classes. A structural model examined how much the Helplessness, Hopelessness, Haplessness Scale, the Brief COPE, the Brief College Student Hassle Scale, and the Body Shape Questionnaire predicted eating disordered tendencies (as measured by the Eating Attitudes Test). The Body Shape Questionnaire, the Helplessness, Hopelessness, Haplessness Scale (inversely), and the Denial subscale of the Brief COPE significantly predicted eating disorder tendencies in first-year college women. In addition, the Planning and Self-Blame subscales of the Brief COPE and the Helplessness, Hopelessness, Haplessness Scale predicted the Body Shape Questionnaire. In general, higher levels on the Helplessness, Hopelessness, Haplessness Scale and higher levels on the Brief College Student Hassle Scale related to higher levels on the Brief COPE. Coping seems to remove the direct path from stress and depression to disordered eating and body dissatisfaction.

1. Introduction

Eating disorders and disordered eating on college campuses are a pervasive problem. Research estimates that approximately 8–13.5% of college women meet the criteria for clinically diagnosed eating disorders such as anorexia nervosa, bulima nervosa, or eating disorders not otherwise specified (Eisenberg, Nicklett, Roeder, & Kirz, 2011). In addition, negative moods (Heron, Scott, Sliwinski, & Smyth, 2014) and stress (Brewerton & Brady, 2014) seem to relate eating disorders. Diagnosable eating disorders emerge in the broader context of disordered eating, that is — engaging in practices such as restricting calories, eating less fat, skipping meals, using nonprescription diet pills, using laxatives, or inducing vomiting (Clemens, Thomb, Olds, & Gordon, 2008). Whereas disordered eating is broadly associated with the dynamics of human development in adolescence in the United States (Nichter, 2000) and the sociocultural pressure to be thin (Stice, 2002), college environments may particularly predispose young women to disordered eating (Mintz & Betz, 1988). In a national survey, 57% of female college students reported trying to lose weight, while only 38% of female college students categorized themselves as overweight (ACHA-NCHA, 2009). Another survey of college students indicated that 61% of college women reported using extreme measures to lose weight including fasting, vomiting, or using appetite suppressants and diuretics (Clemens et al., 2008). Concerns about weight, body image, and eating behaviors are widespread among college women (LaCaille, Dauner, Krambeer, & Pedersen, 2011).

The first year of college seems to be a particularly critical year for weight concerns and disordered eating (Delinsky & Wilson, 2008). Research suggests that disordered eating tends to peak in late adolescence (Swanson, Crow, Le Grange, Swendsen, & Merikangas, 2011) during the college years (Heatherton, Mahamedi, Striepe, Field, & Keel, 1997). Undergraduate women often bring disordered eating tendencies with them from high school (Vohs, Heatherton, & Herrin, 2001), and for most undergraduate women, disordered eating behaviors remain fairly stable over time (Berg, Frazier, & Sherr, 2009). Weight gain among freshman is common, although most of the data points to a 3–5 pound gain (Wengreen & Moncur, 2009), rather than the "freshman ten" or "freshman fifteen" that are more common in college mythologies. One longitudinal study of first year women found that body dissatisfaction was the strongest predictor for disordered eating in the 7-month marker prospective study. In addition, ineffectiveness or general feelings of inadequacy and negative affect predicted a pattern of disordered eating (Cooley & Toray, 2001a). Cooley and Toray (2001a) further suggest that stress might impact these relationships. Although stress has been suggested as another possible risk factor, the individual's ability to cope with the stress or emotional turmoil has not been examined.

Body dissatisfaction consistently predicts disordering eating (Stice, 2002). The relationship may be due in part to the normative discontent in American women concerning their bodies (Grabe, Ward, & Hyde, 2008). However, an elevated level of body dissatisfaction is common among young women (Paxton, Norris, Wertheim, Durkin, & Anderson, 2005), and relatively few women have eating disorders suggesting

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that the exploration of additional risk factors are needed. Risk factors for developing eating disorders in women include 1) general negative affect (Stice, 2002) and depression or hopelessness (Hudson, Hiripi, Pope, & Kessler, 2007), 2) stress (Ball & Lee, 2000; Cooley & Toray, 2001b) and thought suppression as a form of avoidance coping (Lavender, Jardin, & Anderson, 2009), and 3) body-image issues including thin-ideal body image (Weiderman & Pryor, 2000). The present study was designed to examine first year college women's eating habits in the context of their depression, stress, coping strategies, and body dissatisfaction.

2. Method

2.1. Participants

A total of 215 women completed the online survey, in response to recruitment via email in the first 2 weeks of the fall semester. They had a mean age of 18.05 (SD = .22). Participants reported being Caucasian (83.7%, $n = 180$), heterosexual (88.8%, $n = 191$), not married (90.7%, $n = 195$), first year students (94.0%, $n = 202$), with a mean high school GPA of 3.70 (SD = .44). A majority of the participants reported that their parents were still married (75.8%, $n = 163$) and well educated (mother's education — college or above, 72.6%; father's education — college or above, 83.3%). Sample demographics are similar to the university's female first year student characteristics.

2.2. Procedure

All female students who were listed as in their first semester at a mid-sized Midwestern university were sent an email invitation approximately 4 days prior to the start of the fall academic semester (response rate 12.4%). The invitation contained a link to the online "Eating Habits Study" and explained that the participants had approximately 1 week to complete the survey. Potential participants received a reminder email 3 days after the initial invitation. Participants were entered into a drawing for a $10 gift card to a local eatery.

2.3. Measures

Table 1 provides the means, standard deviations, and Cronbach's α for all the quantitative measures.

2.3.1. Eating Attitudes Test (EAT; Garner, Olmsted, Bohr, & Garfinkel, 1982)

The EAT is a 26-item questionnaire used to measure abnormal eating habits and concerns about weight. Participants are asked to rate their intensity of attitudes and behaviors toward food and weight using the response options of never, rarely, sometimes, often, very often, and always. There are three subscales in this measure to evaluate different domains of problematic eating behavior or eating disorder tendencies. The first subscale, Dieting, assesses preoccupation with wanting to be thinner and calorie content of food. The second subscale, Bulimia and Pre-occupation with Food, contains items that reflect participant's feelings about food. The third subscale, Oral Control, reflects the participant's perceived control over eating and pressure from others to gain weight. A score exceeding 20 on the overall scale is considered an indicator of a potential eating disorder problem.

2.3.2. Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987)

The BSQ measures the perceptions of and satisfaction with body shape including the concept of "feeling fat." Each response is measured on a 6-point Likert scale, ranging from never to always. The participants are asked to respond to each item based on the frequency that they have completed the thought or action within the past 4 weeks. Sample items include, "Have you felt ashamed of your body" and "Have you ever felt so bad about your shape that you have cried?"

2.3.3. Helplessness, Hopelessness, and Haplessness Scale (HHH; Lester, 2001)

The HHH scale is a 30-item Likert scale broken into three subscales with ten items each. The HHH instructs participants to rate their level of agreement with a given statement using the response options of strongly agree, agree, neither agree or disagree, disagree, and strongly disagree. Sample items include "I can do just about anything I set my mind to" (reverse scored; helplessness), "I am confident that I will complete college" (reverse scored; hopelessness), and "Many of the unhappy things in my life are partly due to bad luck" (haplessness).

2.3.4. Brief COPE inventory (Carver, Scheier, & Weintraub, 1989)

The brief COPE inventory is an adaptation of the COPE survey. This inventory consists of 28 items and is used to assess responses that indicate either effective or ineffective coping. Each response was measured on a four-point Likert scale ranging from 1 ("I haven't been doing this at all") to 4 ("I've been doing this a lot"). Participants are asked to answer the questionnaire the way they generally handle stressful situations, with the understanding that different circumstances bring out different ways to handle each situation. Sample items include "I've been trying to come up with a strategy about what to do" and "I've been giving up the attempt to cope." The brief COPE has 14 subscales: Active Coping, Planning, Positive Reframing, Acceptance, Humor, Religion, Using Emotional Support, Using Instrumental Support, Self-Distraction, Denial, Venting, Substance Use, Behavioral Disengagement, and Self Blame.

2.3.5. Brief College Student Hassle Scale (BCSHS; Blankstein, Flett, & Koledin, 1991)

The BCSHS is a short 20-item measure of common collegiate frustrations or hassles. The BCSHS instructs student to respond to the question on a 7-point Likert scale ranging from no hassle to extremely persistent hassle. The questionnaire defines "no hassle" as not at all persistent and "extremely persistent hassle" as high frequency and/or duration. This scale includes items such as "academic deadlines" and "financial security."

2.4. Data analytic approach

To examine which variables predict disordered eating, the relationships between the constructs were assessed within a structural equation modeling framework using Mplus version 7.20 (Muthén & Muthén, 1998–2014) and maximum likelihood estimation. A model was proposed based upon theoretical predictions and examined using the following criteria: (1) theoretical salience, (2) global fit indices (χ^2 goodness of fit, Comparative Fit Index: CFI and Tucker–Lewis Index: TLI), and (3) microfit indices (parameter estimates, Root Mean Squared Error of Approximation: RMSEA, and residuals). To meet criteria for theoretical fit, the model must be predicted from documented theory and previous research. For global fit indices, a non-significant χ^2 indicates that the data does not significantly differ from the hypotheses represented by the model; for CFI and TLI, fit indices of above .90 indicate a well-fitting model (CFI, TLI: Hu & Bentler, 1999). For RMSEA, a fit of less than .05 indicates a well-fitting model (Browne & Cudeck, 1992).

3. Results

The mean for the overall EAT scale was 8.89 (SD = 9.26, mode = 2, median = 6, range 0 to 60). Over 13% ($n = 22$) of the sample met the criteria for potential eating disorders with overall scores of 20 or greater. Zero-order correlations between study variables are in Table 1. One primary model was tested using the quantitative measurement data. The model fit the data, $\chi^2(n = 191, 72) = 89.33$, $p = .08$, CFI > .99, TLI = .99, and RMSEA = .035. The parameter estimates can be found in Fig. 1. Most independent variables (i.e., Helplessness, Haplessness, Hopelessness, Hassles and Body Dissatisfaction) indirectly (through