The relationship between disordered eating behavior and drinking motives in college-age women

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Abstract

Previous research has documented that alcohol use disorders and eating disorders often co-occur. One possible reason for these high rates of co-occurrence is that problematic eating and alcohol use serve similar functions for the persons engaging in them. In particular, both have been hypothesized to serve an avoidant coping function. This study was designed to examine the relationships between drinking motives and disordered eating in a sample of college-age women.

A total of 257 women completed the Eating Attitudes Test-26 (EAT-26), Rutgers Alcohol Problems Index (RAPI), and Drinking Motives Measure (DMM). As hypothesized, problematic eating and problematic drinking were positively correlated. Also, regression analyses indicated a strong relationship between problematic eating and the coping scale of the DMM, which measures avoidant coping.

This study extends previous research and provides support for the idea that problematic eating and problematic drinking serve similar avoidant coping functions. This line of research may hold important implications for treatment interventions targeting comorbid alcohol use disorders and eating disorders.

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A fairly extensive line of research has documented that alcohol use disorders and eating disorders often co-occur (for reviews see Holderness, Brooks-Gunn, & Warren, 1994; National Center on Addiction and Substance Abuse, 2003). One possible reason for these high rates of co-occurrence is that problematic eating and alcohol use serve similar functions for the persons engaging in them. In particular, both excessive alcohol consumption and disordered eating (particularly binge eating) have been hypothesized to serve an avoidant coping function. For example, although research has suggested that both positively and negatively reinforcing reasons for using alcohol are associated with actual alcohol consumption, negatively reinforcing reasons, especially avoidant coping or alcohol expectancies, are particularly associated with alcohol-related problems (Cooper, 1994; Cooper, Frone, Russell, & Mudar, 1995; Fromme, Stroot, & Kaplan, 1993; Martens, Cox, & Beck, 2003). Similarly, binge eating has been theorized to serve an avoidant...
function (Heatherton & Baumeister, 1991), and a body of research has found support for this theory. For example, bulimics report more frequent stressful and negative life events preceding binge episodes compared with nonbinge episodes (Davis, Freeman, & Garner, 1988; Lingswiler, Crowther, & Stephens, 1989; Sherwood, Crowther, & Ben-Porath, 2000), and individuals with eating disorders show high rates of avoidant coping (Ghaderi & Berit, 2000; Koff & Sangani, 1997; Neckowitz & Morrison, 1991; Sherwood et al., 2000; Soukup, Beiler, & Terrell, 1990; Troop, Holbrey, & Treasure, 1998).

This study was designed to extend previous studies and examine the relationships between drinking motives and disordered eating in a sample of college-age women. It was hypothesized that problematic eating behavior would be significantly correlated with problematic drinking behavior, and that binge eating would be associated more strongly with avoidant coping than other drinking motives.

1. Method

1.1. Participants

A total of 257 females participated in the study. The majority identified themselves as White (73.9%), with 8.9% identifying themselves as Black and 5.1% as Hispanic. The rest of the participants either identified themselves as another ethnicity or did not provide this information. Participants’ mean age was 19.8±2.8 years and their mean body mass index (BMI) was 22.8±3.3 kg/m².

1.2. Measures

Eating Attitudes Test-26 (EAT-26; Garfinkel & Newman, 2001; Garner, Olmstead, Bohr, & Garfinkel, 1982). Total scores of 20 or above on the EAT-26 are indicative of significant eating pathology. The EAT-26 has three factors: a) dieting (EAT-diet), related to an avoidance of fattening foods and a preoccupation with being thinner; b) bulimia and food preoccupation (EAT-bul), related to reflecting thoughts about food and bulimia; and c) oral control (EAT-oc), related to self-control about eating and the perceived pressure from others to gain weight.

Rutgers Alcohol Problems Index (RAPI; White & Labouvie, 1989). The RAPI assesses the frequency with which individuals experience various alcohol-related problems. The RAPI discriminates between clinical and normal samples of adolescent drinkers (White & Labouvie, 1989). The present study used a RAPI score of above 15 as a cutoff to differentiate heavy drinkers and light drinkers (Danielson, Overholser, & Butt, 2003).

Drinking Motives Measure (DMM; Cooper, 1994; Cooper, Russel, Skinner, & Windle, 1992). The DMM is a 20-item self-report measure assesses the motives behind one’s alcohol use. It contains four subscales: the Social and Enhancement subscales are considered positively reinforcing motives, whereas the Coping and Conformity subscales are considered negatively reinforcing motives.

1.3. Procedure

Some individuals participated in the study in exchange for academic credit, while others were offered the opportunity to be entered into a raffle for one of two $50.00 prizes. All questionnaires were completed anonymously.

2. Results

A total of 49 (19.1%) of participants had scores on the EAT-26 suggestive of significant eating pathology (i.e., a score of 20 or above), 84 (32.7%) had scores on the RAPI suggestive of alcohol-related problems (i.e., a score above 15), and 27 (10.5%) had elevated scores on both measures.

Table 1 shows the correlations between the EAT-26, RAPI, and DMM. As expected, problematic eating as measured by the EAT-26 total score and problematic drinking as measured by the RAPI were positively correlated.

To further assess the relationship between eating pathology and drinking motives, EAT scores were regressed on scores from the three drinking motives. Results indicated that drinking motives predicted EAT total scores, $F(3,250)=10.13, p<.001, R^2=.11$, as well as scores on all the subscales: EAT-diet, $F(3,250)=11.35, p<.001, R^2=.12$, EAT-bul, $F(3,250)=6.83, p<.001, R^2=.08$, EAT-oc, $F(3,250)=2.94, p=.034, R^2=.11$. For all analyses,
however, only the coping motives scale (which largely measures avoidant coping) demonstrated a significant unique relationship with the EAT measures, with standardized beta weights ranging from .22 (EAT-oc) to .31 (EAT-total scores). Squared semi-partial correlations indicated that the coping motives scale uniquely accounted for 3–6% of the variance in the EAT—total and subscale scores.

3. Discussion

This study found that, as hypothesized, problematic eating and problematic drinking were significantly correlated. This study extends previous research by demonstrating that problematic eating behavior (particularly the types of behavior seen in bulimia) was most strongly associated with the use of alcohol as an avoidant coping mechanism. Both problematic eating and drinking have been hypothesized to serve an avoidant coping function; these results suggest that they may serve similar functions in the same individuals.

There are limitations to this study, however. First, because we did not include a direct measure of the function of eating, we cannot state for certain that the individuals in this study were using eating as a measure of avoidant coping. Second, the majority of participants did not report problematic levels of eating and drinking behavior, and it is not clear if our results are representative of those with eating disorders or substance use disorders.

However, despite these limitations, this study provides some support for the idea that problematic eating and problematic drinking serve similar avoidant coping functions. If true, it would have important implications for treatment interventions targeting comorbid alcohol use disorders and eating disorders; a treatment targeting avoidant coping directly may be an effective treatment option for those individuals with both disorders.

References


Table 1
Correlations between EAT-26, DMM, and RAPI scores

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<th>EAT-oc</th>
<th>DMM-soc</th>
<th>DMM-enh</th>
<th>DMM-cop</th>
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<th>RAPI</th>
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An asterisk represents a statistically significant correlation ($p < .01$).


