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## Author Manuscript

*Int J Eat Disord.* Author manuscript; available in PMC 2011 December 1.

Published in final edited form as:

*Int J Eat Disord.* 2010 December ; 43(8): 689–693. doi:10.1002/eat.20781.

## Differences in Coping Across Stages of Recovery from an Eating Disorder

Ellen E. Fitzsimmons, BA<sup>1</sup> and Anna M. Bardone-Cone, PhD<sup>1,\*</sup><sup>1</sup> Department of Psychology, University of North Carolina at Chapel Hill

### Abstract

**Objective**—This study examined the relation between coping skills and eating disorder recovery by comparing these skills across healthy controls, fully recovered, partially recovered, and active eating disorder cases. Full recovery was defined using physical, behavioral, and psychological components.

**Method**—Individuals formerly seen for an eating disorder at a Midwestern clinic were categorized as having an active eating disorder ( $n=53$ ), as partially recovered ( $n=15$ ), or as fully recovered ( $n=20$ ). The coping skills of these groups were compared to each other and to 67 healthy controls.

**Results**—Healthy controls and fully recovered individuals utilized similarly high levels of task- and avoidance-oriented coping and similarly low levels of emotion-oriented coping. Partially recovered individuals looked more similar to those with an active eating disorder.

**Discussion**—Results provide support for a comprehensive definition of eating disorder recovery, of which healthy coping may be an integral component, and for the reevaluation of the notion of “maladaptive” coping.

### Keywords

coping; eating disorders; recovery

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Individuals with eating disorders generally evidence deficits in coping,<sup>1</sup> and in some cases, the disordered eating behavior can be conceptualized as a maladaptive coping behavior (e.g., binge eating or extreme food restriction as a way of coping with negative affect). Furthermore, therapists and patients have identified developing healthier coping skills as an especially important component of the treatment of eating pathology.<sup>2</sup> These findings compel us to better understand what coping looks like as individuals recover from an eating disorder. Can someone fully recover without improved coping skills and thus experience persistent deficits in coping? Or is full recovery closely linked to the development of healthier coping skills, perhaps to the level of healthy controls? The current study seeks to understand how different dimensions of coping compare across different levels of eating disorder recovery encompassing physical, behavioral, and psychological indices.

Coping refers to the thoughts and behaviors that people engage in so as to manage, tolerate, or reduce internal or external demands that are appraised as exceeding an individual's resources<sup>3</sup> and is typically thought of as a factor that mediates the relation between stress and the onset of psychiatric illness.<sup>4</sup> Coping is often depicted as a multidimensional construct, including task-, emotion-, and avoidance-oriented skills. Broadly, task-oriented

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\*Correspondence to: Anna M. Bardone-Cone, PhD, Department of Psychology, University of North Carolina at Chapel Hill, CB#3270-Davie Hall, Chapel Hill, NC 27599. [bardonecone@unc.edu](mailto:bardonecone@unc.edu).

coping involves efforts aimed at solving the problem or altering the situation, emotion-oriented coping involves reactions that are self-oriented, such as emotional responses and self-preoccupation, and avoidance-oriented coping describes activities and shifts in mental focus aimed at avoiding the stressful situation.<sup>5</sup> Generally, task-oriented coping is seen as adaptive, while emotion- and avoidance-oriented coping are viewed as maladaptive.<sup>1</sup> Because the types of stressors reported by individuals with eating disorders appear to fall within the normal range of experience,<sup>4</sup> it seems likely that the ability to manage stress effectively (i.e., via healthy coping skills) has something to do with the likelihood of developing an eating disorder and its maintenance.

Indeed, researchers have found that individuals with eating pathology tend to have more difficulty coping with stress than controls and that this deficit is likely related to their disorder (e.g., poor coping skills may worsen subclinical eating disorder symptoms and lead to the development of a diagnosable disorder).<sup>6</sup> Ball and Lee found that coping skills differed between eating disordered individuals and controls in all of the studies examined in their review.<sup>1</sup> Individuals with anorexia nervosa (AN), bulimia nervosa (BN), or significant eating disorder symptomatology were inclined to demonstrate more avoidance- and emotion-oriented coping when compared to controls. In contrast, healthy controls demonstrated more active coping techniques (e.g., problem-oriented, social support-seeking).<sup>1</sup> Regarding a recovery perspective, some work has found that decreases in eating pathology are related to the use of less avoidant coping strategies, and in patients with BN, recovery was actually associated with the development of coping strategies almost identical to those with no eating disorder history.<sup>7</sup> However, much less is known about the relation between recovery and coping compared to the relation between the presence of eating pathology and coping, and what is known generally relies on recovery defined using physical and behavioral criteria, but not psychological criteria.

In the present study, we examined coping skills across stages of eating disorder recovery, with particular interest in the coping skills of those recovered according to physical, behavioral, and psychological indices. Those fully recovered were compared to individuals currently diagnosed with an eating disorder, individuals partially recovered (only physical and behavioral recovery), and a healthy control group. We proposed that individuals who were fully recovered would have better coping skills (i.e., more task-oriented and less emotion- and avoidance-oriented) than either those who were partially recovered or those who met criteria for an eating disorder and that they would use these skills at levels comparable to healthy controls.

## Method

### Participants and Recruitment

Attempts were made to contact all female eating disorder patients (ages 16 and older) seen at the University of Missouri Pediatric and Adolescent Specialty Clinic ( $N = 273$ ) between 1996 and 2007. This clinic is a primary care and referral clinic specializing in the care of children and adolescents (ages 10–25 years) that has physicians with expertise in eating disorders. Of the 273 eating disorder patients, 96 (35.2%) were successfully contacted and recruited. Fifty-five (20.1%) of the 273 were contacted but did not participate due to other time commitments or lack of interest. Of the remaining patients, four (1.5%) were deceased and 118 patients (43.2%) could not be contacted due to absent or incorrect mailing addresses or inability to make phone contact. These rates are similar to those of other studies doing a first follow-up of eating disorder patients over a range of about 10 years,<sup>8</sup> and results indicated that participants were not significantly different from non-participants on clinical variables such as eating disorder diagnoses or age or BMI at first clinic visit. In sum, of the 151 eating disorder patients we were able to contact, 63.6% participated. Healthy controls

were recruited from two sources: the clinic from which the eating disorder patients were recruited ( $n = 17$ ) and the university campus ( $n = 50$ ). Eligible controls were females ages 16 and older with no current or past eating disorder symptoms.

## Study Procedures

After providing written consent, all participants first completed a set of questionnaires and then, typically one week later, an interview that included a diagnostic clinical interview. Participants were provided financial remuneration (or, for introductory psychology students, course credit) after completing the interview. All aspects of this study were approved by the university's institutional review board.

## Measures

**Measures Used to Define Eating Disorder Status**—The Structured Clinical Interview for DSM-IV, Patient Edition (SCID)<sup>9</sup> was used to determine lifetime and current eating disorders (AN-excluding the amenhorrea requirement, BN, and Eating Disorder Not Otherwise Specified (EDNOS)). We used the Eating Disorder Examination-Questionnaire (EDE-Q)<sup>10</sup> and portions of the Eating Disorders Longitudinal Interval Follow-up Evaluation (LIFE EAT II)<sup>11</sup> to collect data on the psychological and behavioral components of full recovery, respectively. Some recovery work<sup>12</sup> has utilized the Eating Disorder Examination (EDE)<sup>13</sup> interview, which is generally viewed as the gold standard; however, given that the EDE-Q was derived from the EDE and is commonly used<sup>14</sup> and easy to administer, we used the EDE-Q as a logistically practical way to assess psychological recovery. While the subscale scores of the EDE and the EDE-Q are highly correlated, there is some evidence that the EDE-Q may overestimate scores (particularly Shape Concern) in comparison to the EDE.<sup>15</sup> Weight and height were measured (or self-reported for the minority who did not complete the interview in person) to determine body mass index (BMI).

**Coping**—Coping was assessed with the Coping Inventory for Stressful Situations (CISS),<sup>5</sup> a well-validated measure that generates task-, emotion-, and avoidance-oriented subscales.

## Analytic Strategy

Based on data from the SCID, the LIFE EAT II, the EDE-Q, and BMI, participants were categorized into one of four groups: healthy controls, fully recovered eating disorder, partially recovered eating disorder, or active eating disorder. Healthy controls ( $n = 67$ ) had no history of an eating disorder, and active eating disorder cases ( $n = 53$ ) had a current eating disorder diagnosis (AN, BN, or EDNOS). As recommended by Couturier and Lock,<sup>12</sup> we combined a weight index and scores on the EDE-Q subscales to assess recovery. The fully recovered group ( $n = 20$ ) comprised women without a current eating disorder who had a BMI of at least 18.5 kg/m<sup>2</sup>, reported no binge eating, purging, or fasting in the prior three months, and scored within 1 *SD* of community norms on each of the EDE-Q subscales. Individuals were considered partially recovered ( $n = 15$ ) if they met all the criteria of full recovery except for psychological recovery (i.e., at least one EDE-Q subscale greater than 1 *SD* of age-matched norms).FN-1

We used multivariate analysis of variance (MANOVA) to examine potential differences between groups on the various coping dimensions. A significant multivariate effect ( $p < 0.05$ )

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<sup>1</sup>Eight of the study participants did not meet criteria for a current eating disorder or either definition of recovery (i.e., partial or full) and were excluded from analyses. These were primarily individuals who had reported some (though minimal) binge eating or purging, typically once or twice in the past three months. When analyses were run including these eight individuals in the “partial recovery” group, the same pattern of results emerged as presented in the current work (using the stricter definition of partial recovery).

was followed up with univariate tests (analysis of variance (ANOVA)) and Tukey HSD tests.

## Results

Participants ranged in age from 16 to 40 years ( $M=21.78$  years,  $SD=4.28$ ), with most identifying themselves as Caucasian (91.6%) and less as African American (1.3%), Asian (1.9%), or biracial/biethnic (5.0%). In terms of socio-economic status, participants' highest levels of parental education ranged from 11 to 21 years ( $M=16.60$  years,  $SD=2.73$ ). The groups were similar in terms of ethnicity and socio-economic status, but differed in age ( $F(3, 151) = 15.44, p<0.001$ ), with healthy controls significantly younger than the eating disorder groups. Controlling for age did not change the pattern of significance, so results without age as a covariate are presented for parsimony. Of the active eating disorder group, 17% currently had AN, 6% had BN, and 77% had EDNOS (most with bulimic-type presentations).

In terms of correlations among coping skills, task- and emotion-oriented coping were negatively correlated, as expected ( $r = -0.53, p<0.001$ ). Somewhat surprisingly, avoidance-oriented coping was not significantly related to task-oriented coping ( $r = 0.14, p<0.08$ ) and was negatively related to emotion-oriented coping ( $r = -0.19, p<0.05$ ).

The MANOVA revealed that coping subscales varied across groups,  $F(9,338) = 12.07$ , Wilks' Lambda = 0.51,  $p<0.001$ , partial  $\eta^2 = 0.20$ . In order to further examine the nature of these group differences, univariate tests were conducted (see Table 1). Fully recovered individuals and healthy controls had very similar levels of task-oriented coping that were significantly higher than partially recovered individuals and those with an active eating disorder. Fully recovered individuals and healthy controls also scored similarly on emotion-oriented coping, and for both groups these scores were significantly lower than those with an active eating disorder. Whereas group differences emerged for avoidance coping, they were not as expected. The fully recovered group and healthy controls were similar in their levels of avoidance-oriented coping, with the only group differences involving the healthy group exhibiting greater levels of avoidance than the partially recovered or active eating disorder groups. For each coping style, the partially recovered and active eating disorder groups did not differ.

## Discussion

Results indicated that healthy controls and fully recovered individuals were using similarly high levels of task-oriented coping and similarly low levels of emotion-oriented coping. These results demonstrate that individuals who are fully recovered from an eating disorder (i.e., on physical, behavioral, and psychological dimensions) look nearly identical to healthy controls in terms of these coping skills. Furthermore, the partially recovered individuals looked more similar to those with an active eating disorder than to the fully recovered group. Making the distinction between full and partial recovery appears to create two groups with differing coping strategies, providing evidence that looking at eating disorder recovery in a more comprehensive manner is essential.

Interestingly, results for avoidance-oriented coping, which typically has been seen as maladaptive, ran contrary to what we had expected. That said, although avoidance has been associated with eating disorder symptoms, some studies have found results to the contrary. 16-17 Importantly, avoidant coping strategies are not *always* maladaptive.<sup>18</sup> These strategies can be effective in the short-term for reducing pain, stress, or anxiety, and can include some adaptive strategies (e.g., spending time with a special person or going for a

walk, which are concepts included in the avoidance subscale of the CISS). Another way to understand the findings related to avoidance is to consider that the combination and temporal ordering of coping skills may be important in determining what is “maladaptive.” For instance, it may be advantageous for an individual to initially and briefly use avoidance techniques followed by a more task-oriented strategy (e.g., go for a run (avoid) to clear one’s head and then return home and engage in active problem-solving).

This study contributes to the existing literature by utilizing a more comprehensive definition of recovery. Unlike other work, we were able to examine coping across these various stages of an eating disorder. Additional strengths include the use of a diagnostic interview, the recruitment through a primary care facility (which contributes to generalizability), and the criteria used for healthy controls, which avoided comparisons against a “super healthy” and likely unrepresentative group.<sup>19</sup>

One limitation of the current study is that we were unable to contact a significant minority of individuals. Additional limitations include the cross-sectional design, the younger healthy controls, the small sample size (particularly of the partially recovered group), and the grouping together of histories of AN, BN, and EDNOS. Finally, the high percentage of the active eating disorder group with EDNOS featuring binge-purge behaviors is a limitation; findings may have differed if most of the active eating disorder group had an anorexic presentation.

Future research should examine coping and recovery in a longitudinal framework to better understand how these variables interact given that improvements in coping skills likely both contribute to and are a result of decreased eating pathology.<sup>20</sup> Different facets of coping should also be assessed (e.g., “seeking social support” from the Ways of Coping Questionnaire<sup>21</sup>). Further, it would be fruitful to determine if, in working toward full recovery, it is more important for an individual to increase their use of task-oriented coping versus decreasing their use of emotion-oriented coping. Future research should also continue to define recovery in a comprehensive manner, using physical, behavioral, and psychological criteria.<sup>22</sup>

These findings highlight the importance of understanding the relation between coping skills and stages of eating disorder recovery. Our results indicate that, for at least some individuals, comprehensive recovery is possible and that this type of recovery is associated with levels of coping comparable to healthy controls, specifically, high levels of task- and avoidance-oriented coping and low levels of emotion-oriented coping. Given the perception of eating disorders as chronic and lifelong, it is encouraging to find that full recovery of this nature can be attainable.

## Acknowledgments

This research was supported in part by the following grants: NIH 1 R03MH074861-01A1; University of Missouri PRIME Grant; and University of Missouri Research Council Grant.

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TABLE 1

Comparison of coping skills across eating disorder recovery status groups

	Healthy Controls	Fully Recovered	Partially Recovered	Active Eating Disorder	Significance	Pairwise Comparisons
Task-oriented	62.45 (9.52)	62.20 (6.50)	53.07 (12.90)	52.69 (9.44)	$F(3, 145) = 12.49; p < 0.001$ partial $\eta^2 = 0.21$	HC > PRED, AED FRED > PRED, AED
Emotion-oriented	37.71 (10.79)	40.90 (7.39)	49.07 (11.44)	55.73 (9.40)	$F(3, 148) = 33.01; p < 0.001$ partial $\eta^2 = 0.40$	HC < PRED, AED FRED < AED
Avoidance-oriented	50.65 (11.16)	46.10 (10.09)	42.60 (10.78)	41.33 (8.16)	$F(3, 149) = 9.03; p < 0.001$ partial $\eta^2 = 0.15$	HC > PRED, AED

*Note.* HC = healthy controls; FRED = fully recovered eating disorder; PRED = partially recovered eating disorder; AED = active eating disorder. For all measures, higher scores reflect higher levels of the construct. Pairwise comparisons listed were significant at least at  $p < 0.05$ .