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Examining the Match Between Assessed Eating Disorder Recovery and Subjective Sense of Recovery: Preliminary Findings

Anna M. Bardone-Cone
Department of Psychology, University of North Carolina at Chapel Hill.

Abstract

This study examined how individuals clinically assessed as fully or partially recovered from an eating disorder subjectively perceived themselves in terms of stage of change in the recovery process. Individuals formerly seen for an eating disorder at a Midwestern clinic were recruited. Using validated definitions of recovery, 18 were fully recovered (physical, behavioral, and psychological recovery) and 15 were partially recovered (only physical and behavioral recovery); these groups were compared on overall stage of change and confidence related to this stage, dieting stage of change, and internality of motivation. The fully and partially recovered groups endorsed being fully recovered (overall and for dieting) at similar rates. There were trends for the fully recovered group seeking change primarily for themselves and being more confident in their stage of change choice. Results have implications for approaches when a client's assessed recovery stage does not match her subjective sense of recovery and for better understanding recovery from an eating disorder.

Keywords

eating disorders; recovery; stage of change; subjective

Research on eating disorder recovery suggests that full recovery and partial recovery can be identified, with both encompassing physical and behavioral recovery, but only those in full recovery exhibiting psychological recovery (Bardone-Cone et al., 2010). How do individuals assessed to be at some stage of recovery (full or partial), perceive their recovery status? Both fully and partially recovered individuals might reasonably endorse being recovered by virtue of not being underweight and not engaging in eating disorder behaviors. However, partially recovered individuals may recognize that they are not quite recovered yet; that while they are *doing* things that represent eating disorder recovery, they are still *thinking* eating disordered thoughts. Understanding how individuals perceive their recovery is an important piece of understanding eating disorder recovery and has clinical implications for the recovery process. In this paper, I examine how individuals clinically assessed as fully or partially recovered from an eating disorder view themselves in terms of recovery.

One way to look at subjective sense of recovery is via stage of change. Most work in this area applies the transtheoretical model of change which posits that behavioral change occurs through a set of stages of motivation: precontemplation (unwilling to change/not aware of a problem), contemplation (thinking about change, not yet engaging in change), preparation (intending to change in the near future), action (active involvement in making changes),

Address correspondence to Anna M. Bardone-Cone, CB #3270 Davie Hall, Department of Psychology, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599; phone: 1-919-962-5989; fax: 1-919-962-2537; bardonecone@unc.edu.

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maintenance (working to maintain changes, thus a continuation of change), and, in some variations, termination/recovery (behaviors no longer a problem) (Gusella, Butler, Nichols, & Bird, 2003; Prochaska, DiClemente, & Norcross, 1992).

In the eating disorder field, evidence suggests that pre-treatment motivation/stage of change predicts treatment outcomes and treatment completion across samples of individuals with AN and bulimia nervosa (BN) (Franko, 1997; Geller, Drab-Hudson, Whisenhunt, & Srikameswaran, 2004; Gusella et al., 2003; McHugh, 2007; Wade, Frayne, Edwards, Robertson, & Gilchrist, 2009) and that motivation to change at discharge predicts weight maintenance at follow-up among individuals recovering from AN (Castro-Fornieles et al., 2007). However, findings are mixed (e.g.,Treasure, Katzman, Schmidt, Troop, Todd, and de Silva, 1999) and Wilson and Schlam (2004) provide a critique of the transtheoretical model as typically applied to eating disorders. However, this study makes use of the concept of stage of change in a novel way. In contrast to most existing work that examines stage of change at the start of or during treatment, the focus here is on how individuals with a reasonable claim to recovery think about themselves in the recovery process. Believing that one is more or less far along in recovery than indicated by physical, behavioral, and psychological assessments is potentially important information for clinicians and the individuals themselves.

Because the operationalized distinction between full recovery (physical, behavioral, and psychological recovery) and partial recovery (only physical and behavioral recovery) is so new, there has been no examination to date of how these recovery groups may perceive where they are in the recovery process. It may be that the partially recovered group would endorse the "maintenance" stage, but that those in the fully recovered group would endorse the "recovery" stage, which would be the best match to the clinical assessment. If some partially recovered individuals identify with a "recovery" stage and some fully recovered individuals see themselves at "maintenance," this would arguably have interesting clinical implications. Given the absence of literature on the subjective sense of recovery among those in recovery from an eating disorder, analyses were exploratory.

Method

Participants and Recruitment

Attempts were made in 2007 to contact all female patients (ages 16 and older)1 seen for an eating disorder between 1996-2007 at the University of Missouri Pediatric and Adolescent Specialty Clinic, a primary care and referral clinic with physicians with eating disorders expertise. Eating disorder patients were recruited using contact information from patient records, public records, and paid tracking searches. Up to two mailings were sent out and if there was no response, then attempts were made to contact the eligible participant via phone to describe the study and solicit participation.

Of 273 eating disorder patients eligible, we contacted 151 (55%). (Of the remaining patients, four (1.5%) were deceased and 118 (43.2%) could not be contacted due to absent/incorrect mailing addresses or inability to make phone contact.) Of those contacted, 96 (64%) participated in this study, reflecting 35% of the total eligible sample of 273. These rates of contact and participation are similar to those of other studies doing a first follow-up of eating disorder patients over a similar follow-up period (Reas, Williamson, Martin, & Zucker, 2000; Yackobovitch-Gavan et al., 2009). In the current study, results indicated that

[1]The study limited recruitment to those 16 and older in order to be able to use the same measures, validated on older adolescents and adults, for all study members; this avoids problems related to making comparisons on constructs assessed with different instruments.

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participants were not significantly different from non-participants on clinical variables such as eating disorder diagnoses or age or body mass index (BMI) at first clinic visit.

Because this study focused on individuals well-along in recovery, the initial sample size for the present analyses was smaller, representing 35 individuals who no longer had an eating disorder and who met criteria for full or partial recovery (see Measures Used to Assess Eating Disorder Recovery Status). These individuals were assessed on average 6.48 years (*SD* = 2.46) after their initial presentation at the clinic; about 51% had a history of AN, 20% a history of BN, 11% a history of AN and BN, and 17% a history of Eating Disorder Not Otherwise Specified (EDNOS).

Procedures

After providing written consent (minors providing assent and parental consent), all participants first completed a set of questionnaires and then, about one week later, an interview. Most completed the questionnaires and interview in person; those who lived too far away to travel to the study site completed the questionnaires via mail and did a phone interview. Participants were provided $50 in financial remuneration for their participation. All aspects of this study were approved by the university's institutional review board.

Measures

Measures used to assess eating disorder recovery status—To ensure that criteria for a current eating disorder were no longer met, we used the Structured Clinical Interview for DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 1995) to screen out current diagnoses of AN (excluding the amenorrhea requirement), BN, and EDNOS. To determine physical recovery, we computed BMI from measured weight and height (or self-reported indices for the minority who did not complete the interview in person). To determine behavioral recovery (i.e., no binge eating, purging, or fasting in the past three months), we used portions of the Eating Disorders Longitudinal Interval Follow-up Evaluation (LIFE EAT II; Herzog, Sacks, Keller, Lavori, von Ranson, & Gray, 1993). To determine psychological recovery, we used the Eating Disorder Examination-Questionnaire (EDE-Q; Fairburn & Beglin, 1994). The SCID, LIFE EAT II, and EDE-Q are all well-established measures with good psychometric properties (Anderson & Williamson, 2002; Fairburn & Beglin, 1994; Herzog et al., 1993; Luce & Crowther, 1999; Segal, Hersen, & Van Hasselt, 1994).

Following the general suggestions of Couturier and Lock (2006) and the guidelines validated by Bardone-Cone et al. (2010), 20 fully recovered women were identified based on the absence of an eating disorder, a BMI of at least 18.5 kg/m^2 (the lower end of “normal” per the World Health Organization; Bjorntorp, 2002) (physical recovery), no binge eating, purging, or fasting in the prior three months (behavioral recovery), and scoring within 1 *SD* of age-matched community norms on each of the EDE-Q subscales: Restraint, Eating Concern, Weight Concern, and Shape Concern (Mond, Hay, Rodgers, & Owen, 2006) (psychological recovery). However, two individuals did not have data on subjective sense of recovery, reducing the fully recovered group analyses to 18. An additional 15 women were considered partially recovered based on having no current eating disorder, a BMI of at least 18.5 kg/m^2, no binge eating, purging, or fasting in the prior three months, but having scores greater than 1 *SD* of age-matched community norms on at least one of the EDE-Q subscales (i.e., not meeting criteria for psychological recovery).

Subjective sense of recovery—The Motivational Stages of Change for Adolescents Recovering from an Eating Disorder (MSCARED; Gusella et al., 2003) was administered as part of the interview. The MSCARED asks about overall stage of change related to eating

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disorder recovery: precontemplation, contemplation, preparation, action, maintenance, and recovery, as well as level of confidence about being at this stage (7-point scale: *not sure at all* to *very sure*). Participants also reported their stage of change related to giving up dieting, a disordered eating pattern that cuts across eating disorder diagnoses, and reported on whether they were "taking action" against the eating disorder mostly for themselves, mostly for others, or equally for themselves and for others, representing degree of internality of motivation. Although there are no psychometric data on the MSCARED in adults, there is support for its reliability and predictive validity among adolescents (Gusella et al., 2003). The MSCARED was chosen for its brevity, its applicability to a mixed eating disorder sample, and its focus on an overall gestalt of recovery, stages of change related to specific behaviors, and the assessment of internality of motivation.

Analytic Strategy

First, outcome variables related to subjective sense of recovery were examined. For most variables, only two response options were endorsed (e.g., all participants identified their overall stage of change as maintenance or recovery) or the data were heavily skewed (e.g., for dieting stage of change, 12 participants endorsed maintenance and 16 endorsed recovery). Thus, with the exception of the variable tapping into confidence about stage of change, which showed much greater variability, the outcome variables were dichotomized to reflect the existing distributions. Chi square analyses were used for the dichotomous variables, and a *t*-test for the continuous variable.

Results

The fully recovered group had a mean age of 24.61 years ($SD = 5.07$) with highest parental education (a proxy for socio-economic status) of 16.72 years ($SD = 3.06$). The partially recovered group had a mean age of 23.53 years ($SD = 5.80$) with highest parental education of 16.63 years ($SD = 2.52$). Both groups were primarily Caucasian (>93%). The groups did not differ in age, socio-economic status, or race, or in terms of pattern of lifetime eating disorder diagnoses, number of years since initial presentation, or age or BMI at start of treatment.

The results of the Chi square analyses are presented in Table 1. There were no significant differences between groups in terms of percentiles perceiving themselves to be fully recovered overall or recovered from dieting. In terms of the reason for taking action against the eating disorder, there was a marginally significant difference ($p = .056$) with more of the fully recovered group reporting that they took action against the eating disorder primarily for themselves. In terms confidence about being at the overall stage they identified, there were no group differences: $t(31) = 1.61$, $p = .118$. However, an inspection of the means (fully recovered, $M = 6.50$, $SD = .71$; partially recovered, $M = 5.93$, $SD = 1.28$) and Cohen's $d = .55$ (medium effect size; Cohen, 1988) suggest that this difference may have emerged as significant in a larger sample size, with the fully recovered group expressing greater confidence about their stage of change.

Discussion

When comparing individuals assessed as fully recovered from an eating disorder with those assessed as physically and behaviorally, but not psychologically, recovered, there was no difference in their overall subjective sense of recovery. Given the emphasis put on weight and eating disorder behaviors in defining an eating disorder and its recovery (e.g., in media coverage), this finding may not be surprising. Also, when insurance companies cover inpatient eating disorder care, it is often until a certain weight-related criterion is met, with no explicit discussion about psychological recovery, and this could further promote the idea

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of physical and behavioral recovery constituting eating disorder recovery. It is interesting that about 33% of those assessed as being fully recovered identified in the maintenance stage. This categorization could be due to holding an illness representation of an eating disorder as never fully curable (Stockford, Turner, & Cooper, 2007) or due to having more recently achieved the criteria of full recovery and thus feeling hesitant to identify as such.

The groups did not differ in terms of the percentiles feeling they had fully given up dieting. Interestingly, in each recovery group there were individuals who endorsed feeling fully recovered overall but being in the maintenance stage of dieting, as well as individuals who felt they were in the maintenance stage in terms of overall recovery, but felt fully recovered regarding dieting. This suggests the need to inquire about perceptions related both to overall recovery and to recovery related to specific eating disorder aspects since they may differ.

About three-quarters of the fully recovered group said that they were motivated to work on recovery mainly for themselves, while this was true for less than half of the partially recovered group. This trend may reflect an important prerequisite for full recovery. Indeed, clinicians and researchers stress the importance of an internal motivation (e.g., “I'm doing this for me”) for positive outcomes and recovery (Federici & Kaplan, 2008; Geller, Cockell, & Drab, 2001; Geller et al., 2004).

Strengths of this study include: the use of fully and partially recovered eating disorder groups, defined using validated categories; the use of structured clinical interviews; and the novelty of the research question. The main limitation of this study is the small sample size; these results should be considered preliminary and will require replication. Other limitations include: the cross-sectional design; generalizability; and the absence of psychometric data in adult samples for the MSCARED, although the questions are face valid and based on the transtheoretical model of change which has support in adult populations. Lastly, a substantial portion of eligible participants did not participate (primarily from not being able to be contacted) and although analyses indicated that participants did not differ from those who did not participate on a variety of eating disorder-related measures, they could have differed on unmeasured, relevant measures.

Notwithstanding these limitations, this work begins the discussion of how individuals clinically assessed as being in some stage of eating disorder recovery may perceive their recovery stage differently, with intriguing clinical implications. For example, what does it mean that someone who is partially recovered feels they are fully recovered? An implication for clinicians is that while their client may feel recovered, she may not be on psychological dimensions, suggesting the importance of explicitly assessing psychological aspects of eating disorders and targetting them for intervention; not doing so may increase risk for relapse. It could be that the perception of full recovery comes from having returned to a pre-eating disorder state which the individual views as normative, in which case psychoeducation regarding what full recovery can look like may be warranted. Combining self-determination work with the trend-level findings regarding internal motivation to recover, it may be that eating disorder treatment should foster the internalization of change so that individuals “own” the change and experience it as a reflection of who they are (Vansteenkiste, Soenens, & Vandereycken, 2005).

Future research among recovered samples may want to ask about stages of change specific to psychological features such as eating disorder cognitions (Pinto et al., 2006; Geller & Drab, 1999; Rieger & Touyz, 2006). A longitudinal design that would follow up those in partial and full recovery would be useful in determining whether one's subjective sense of recovery (or the match/mismatch between assessed and subjective recovery) predicts ongoing recovery or relapse.

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In conclusion, this is the first study to examine how individuals in some stage of assessed eating disorder recovery perceive their recovery status. Despite the aforementioned limitations, the results are intriguing and add to our understanding of how individuals view their recovery from an eating disorder and what might be associated with full recovery.

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Table 1

Distribution of Responses to Overall Stage of Change, Dieting Stage of Change, and Reason for Taking Action Against the Eating Disorder Across the Fully Recovered and Partially Recovered Groups

Outcome	Partially Recovered (n = 15)	Fully Recovered (n = 18)	Phi	χ^2	Significance
Overall Stage of Change = Recovery	60.0% (n = 9)	66.7% (n = 12)	-.07	.16	.692
Dieting Stage of Change = Recovery	42.9% (n = 6)	58.8% (n = 10)	-.16	.78	.376
Reason Taking Action Against ED = Mostly for Self	42.9% (n = 6)	76.5% (n = 13)	-.34	3.66	.056

Note. ED = eating disorder. The outcome variables are dichotomous variables. For Overall Stage of Change: recovery or maintenance; for Dieting Stage of Change, recovery or maintenance/action/preparation/precontemplation; and for Reason Taking Action Against ED: mostly for self or equally for themselves and for others. One participant from the fully recovered group and one from the partially recovered group did not provide data on the dieting stage of recovery or the reason for taking action against the eating disorder.