



Empirical Research

Acceptance-based treatment and quality of life among patients with an eating disorder



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ARTICLE INFO

Article history:

Received 25 July 2014

Received in revised form

17 October 2014

Accepted 6 November 2014

Keywords:

Eating disorders

Quality of life

Acceptance and commitment therapy

Defusion

ABSTRACT

This study assessed the relationship between acceptance-based constructs and quality of life (QOL) among patients with an eating disorder, as well as whether an acceptance-based treatment group could improve QOL. Patients ($n = 105$) at a residential treatment center received treatment as usual (TAU) or TAU plus twice-weekly acceptance and commitment therapy groups (TAU+ACT), and completed assessments at admission and discharge. Higher scores on several acceptance-related constructs at admission were associated with better psychological QOL, and pre- to post-treatment improvements in the ability to defuse from distressing internal experiences were associated with improved QOL. However, no differences in pre- to post-treatment changes in QOL were observed between treatment conditions. These results suggest that while some acceptance-related variables (e.g. defusion, impulse control, access to emotion regulation skills) may contribute to QOL, ACT does not appear to incrementally improve these variables or QOL beyond standard treatment programs. Additional research is needed to evaluate whether ACT may confer greater benefit for improving QOL in an outpatient setting where patients have more opportunity to utilize ACT skills, or when a stronger dose of treatment is administered.

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1. Introduction

Eating disorders (EDs) and subthreshold disordered eating behaviors are associated with significant impairments in quality of life (QOL), especially in the psychological domain (Engel, Adair, Hayas, & Abraham, 2009; Jenkins, Hoste, Meyer, & Blissett, 2011; Winkler et al., 2014). QOL is generally inversely associated with the severity of ED symptoms (Padierna, Quintana, Arostegui, Gonzalez, & Horcajo, 2000; Bamford & Sly, 2010), and poorer pre-treatment QOL is associated with greater risk of treatment dropout (Abd Elbaky et al., 2014). Although ED treatment completion is associated with moderate improvements in QOL, QOL in treated patients tends to remain below population norms (Engel et al., 2009; Jenkins et al., 2011), perhaps because of continuing symptoms and ED-related cognitions and/or affective experiences (e.g., continued body image disturbances, continued urges to binge). Continued impairment in QOL also may reflect the fact that existing treatments' primary goal is symptom reduction rather than improvement in QOL more broadly. Given that many individuals

experience ED symptomatology for years even with treatment (Steinhausen, 2002; Wonderlich et al., 2012), an increased focus on improving QOL independent of symptom reduction may benefit many patients.

One set of variables that may impact QOL among patients with EDs are those targeted by acceptance-based treatments. These variables, including mindfulness (i.e., non-judgmental awareness of one's present-moment experience), psychological acceptance (i.e., welcoming one's internal experiences without trying to avoid, suppress, or change them), emotion regulation (i.e. reducing one's vulnerability to negative emotions, learning to experience positive emotions, and learning to reduce emotional suffering), defusion (i.e., achieving psychological distance from one's thoughts and feelings), and committed action (i.e., developing patterns of behavior consistent with one's chosen values), relate to and are strategies that can be used to develop psychological flexibility (i.e., the ability to persist in or change behavior when doing so serves valued ends; Biglan, Hayes, & Pistorello, 2008). Greater psychological flexibility and related constructs may reduce the impact of ED symptoms on QOL, as individuals with a greater ability to persist in or change behaviors in the service of one's values likely perceive their position in life more positively. Additionally, patients high in psychological flexibility and related constructs likely maintain a higher QOL even in the presence of ED symptoms, as they

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presumably perceive these symptoms as less disruptive and are less likely to allow these symptoms to interfere with their behavioral goals. For example, a patient who experiences ED symptoms but is able to take a welcoming stance toward her ED cognitions, fears, and insecurities and does not allow these symptoms to control her interpersonal and professional life would likely experience less impairment of QOL compared to the patient who is unwilling to tolerate these internal experiences and therefore struggles to live consistently with her values.

By targeting psychological flexibility and its related constructs, acceptance-based therapies such as Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 2012) may be well-suited to improving QOL among ED patients. A growing number of case and pilot studies utilizing mindfulness and acceptance-based therapies to treat EDs have yielded promising results for symptom improvement, suggesting the potential utility of this treatment paradigm (Manlick, Cochran & Koon, 2013; Masuda & Hill, 2013). In addition, prior research with populations with other psychiatric and health conditions has shown that acceptance-based treatments can improve QOL (e.g., Lillis, Hayes, Bunting, & Masuda, 2009; Roemer, Orsillo, & Salters-Pedneault, 2008). To date, however, pilot studies of acceptance-based treatment for EDs have focused largely on symptom reduction, despite the fact that the primary goal of these treatments is to improve values-consistent behavior as opposed to symptom reduction per se (Forman & Herbert, 2009). Assessing the impact of acceptance-based treatments on QOL in addition to symptom reduction appears warranted.

The present study had two major goals: (1) Examine the relationship between QOL and acceptance-related constructs among a sample of ED patients, and (2) assess whether an ACT-based treatment for EDs could improve QOL beyond treatment as usual (TAU). As such, we randomized patients at a residential ED treatment center to receive TAU or TAU plus twice-weekly ACT groups (TAU+ACT), and assessed ED severity, QOL, and several acceptance-related variables at both admission to and discharge from treatment.

We proposed four hypotheses for the present study. First, we hypothesized that baseline levels of acceptance-related variables would be associated with QOL at admission to treatment, even when controlling for ED severity. Second, given previous findings that QOL among ED patients tends to improve with treatment, we hypothesized that individuals in both conditions would experience improvements in QOL from pre- to post-treatment. However, we hypothesized that participants in the TAU+ACT condition would exhibit greater improvements in QOL than those who received only TAU. Finally, we hypothesized that changes in acceptance-based constructs over the course of treatment would correlate with change in QOL, such that individuals who exhibited larger improvements on acceptance-related variables, regardless of treatment condition, would report greater gains in QOL, even when controlling for change in ED severity.

2. Methods

2.1. Overview

The present study utilized data obtained in a published outcome study (Juarascio et al., 2013). The study utilized a nonequivalent groups design whereby half of the participants received standard TAU and half received TAU+ twice-weekly acceptance-based treatment groups, which primarily utilized an ACT treatment approach. Pre-treatment assessment occurred within three days of admission; post-treatment assessment occurred between five and zero days before discharge. Participants in the TAU

condition received standard treatment at the treatment center. Participants in the TAU+ACT condition received all TAU elements and also received twice-weekly ACT group treatment in lieu of regularly programmed staff-run leisure groups. For additional information about the pre-treatment characteristics of the sample; the treatment approach utilized by the treatment center; the treatment manual, adherence, and competency; and a full list of administered measures, see Juarascio et al. (2013).

2.2. Participants

The study took place at a residential ED treatment facility for women in the Mid-Atlantic region of the United States. Any woman admitted to the facility with a diagnosis of AN, BN, or EDNOS in the AN or BN spectrum (based on the Structured Clinical Interview for DSM-IV Disorders; First, Spitzer, Gibbon, & Williams, 2002) was eligible. There were no other exclusion criteria. A total of 140 women consented to take part in the study, with an average age of 26.7 years ($SD=9.2$), and a range of 18–55. The sample was predominantly White (89.3%), with small proportions of other non-White groups (Black=3.6%, Asian=2.1%, Hispanic=2.9%, and Other=1.4%).

Of the 140 who consented to take part in the study, 85% returned pre-treatment questionnaires ($n=120$); 92.5% of those individuals also returned post-treatment questionnaires ($n=111$). Participants in the TAU+ACT condition attended 4.75 ($SD=2.51$, range 0–11) group sessions on average. Treatment completers, defined as those attending ≥ 3 sessions ($n=56$, of whom 52 completed post-treatment measures; 93%), were equivalent to non-group completers on demographic and baseline variables. The results described below used the completer samples (TAU+ACT: 52 patients who completed ≥ 3 groups and post-treatment measures; TAU: all 53 patients who completed post-treatment measures), though intent to treat analyses showed similar patterns of response.

2.3. Measures

2.3.1. Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 1994)

The EDE-Q covers a 4-week time period and assesses the core features of EDs. Four subscales may be derived from the instrument (Restraint, Weight Concern, Shape Concern, and Eating Concern), together with a global score. Internal consistency and test-retest reliability are excellent (Luce & Crowther, 1999). Cronbach's alphas for the current study were: Global=0.91, Restraint=0.82, Eating Concern=0.70, Shape Concern=0.90, and Weight Concern=0.86.

2.3.2. Eating Disorder Quality of Life (EDQoL; Engel et al., 2006)

The EDQoL is a 25-item measure that assesses the impact of ED symptoms on QOL in the last 30 days across four domains: Psychological, Physical/Cognitive, Work/School, and Financial. Sample items include "How often has your eating/weight resulted in less interest or pleasure in activities?" (Psychological), "How often has your eating/weight affected your ability to pay attention when you wanted to?" (Physical/Cognitive), "How often has your eating/weight led to low grades?" (Work/School), and "How often has your eating/weight resulted in significant financial debt?" (Financial). Subscores for each domain and a total score can be derived. The EDQoL has demonstrated excellent psychometric properties (Engel et al., 2006). Cronbach's alpha for the total score was .89 for the current study and subscale alphas for the current study ranged from 0.86 to 0.93. The EDQoL was chosen over a more general QOL measure because it results in a more accurate description of QOL

in this population (Ackard, Richter, Egan, Engel, & Cronmeyer, 2014; Engel et al., 2009).

2.3.3. Difficulties in emotion regulation (DERS; Gratz & Roemer, 2004)

The DERS is a 36-item multidimensional self-report measure assessing individuals' characteristic patterns of emotion regulation. It contains six subscales: Nonacceptance of Emotional Responses, Difficulties Engaging in Goal-Directed Behavior, Impulse Control Difficulties, Lack of Emotional Awareness, Limited Access to Emotion Regulation Strategies, and Lack of Emotional Clarity. The DERS has good overall internal consistency (Gratz & Roemer, 2004); subscale alphas for the current study ranged from 0.91 to 0.95.

2.3.4. Acceptance and Action Questionnaire-II (AAQ-II; Bond et al., 2011)

The AAQ-II is a measure of psychological flexibility. The 7-item version of the AAQ-II, which has demonstrated greater psychometric consistency than the 10-item version (Bond et al., 2011) was used in the present study. The measure was scored such that higher scores indicate greater levels of psychological inflexibility. The AAQ-II has demonstrated adequate reliability and validity (Bond et al., 2011). Cronbach's alpha for the current study was .92.

2.3.5. Drexel Defusion Scale (DDS; Forman et al., 2012)

The DDS assesses the extent to which a person is able to distance him/herself from negative thoughts, feelings, and physiological reactions. It has been demonstrated to have acceptable reliability (Forman et al., 2012). Cronbach's alpha for the current study was .83.

2.4. Analytic approach

Data were analyzed using IBM SPSS Statistics (Version 21.0). Hypotheses 1 and 4 were tested using Pearson correlation analyses and partial correlation analyses (controlling for EDE-Q Global scores). For Hypothesis 4, change on the EDQoL was scored such that higher scores reflect greater improvements in QOL. Changes on acceptance-based variables were scored such that higher scores reflect greater improvements in these variables. Hypothesis 2 was tested using a paired sample t-test. Hypothesis 3 was evaluated using a mixed model ANOVA with time point (pre- versus post-treatment) and condition (TAU+ACT versus TAU) as independent variables and EDQoL scores as dependent variables.

3. Results

Hypothesis 1. Baseline responses on acceptance-based constructs would be associated with QOL.

In general, moderate correlations were observed between baseline EDQoL scores and baseline acceptance-based constructs (see Table 1). Higher acceptance, ability to defuse, and ability to regulate emotions were correlated with better QOL in most domains. To assess whether the observed relations were due to the correlation between ED symptoms and acceptance-based constructs, the relationships between acceptance-based constructs and EDQoL scores at baseline were examined using partial correlations controlling for EDE-Q Global scores. Although many of the previously significant relationships were no longer significant when partialing out the variance attributable to ED symptoms, several associations remained significant above and beyond the effect of ED symptoms (see Table 1).

Hypothesis 2. QOL would improve during treatment.

Large improvements were observed in psychological QOL ($t(102) = -11.26, p < 0.01$) and large declines were observed in financial QOL ($t(101) = 4.13, p < 0.01$) and work/school QOL ($t(102) = 5.35, p < 0.01$). No significant changes were observed in physical/cognitive QOL ($t(102) = -1.47, p = 0.15$), or in overall EDQoL ($t(102) = 0.32, p = 0.74$).

Hypothesis 3. Patients in the TAU+ACT condition would show greater improvements in QOL.

No differences were observed between individuals in the TAU versus the TAU+ACT condition on changes in any subscale of the EDQoL (EDQoL Psychological: $F(1, 67) = 0.28, p = 0.45$, partial $\eta^2 = 0.01$; EDQoL Cognitive/Physical: $F(1, 67) = 0.44, p = 0.45$, partial $\eta^2 = 0.008$; EDQoL Financial: $F(1, 67) = 0.01, p = 0.97$, partial $\eta^2 < 0.001$; EDQoL Work/School: $F(1, 65) = 0.06, p = 0.80$, partial $\eta^2 = 0.001$; EDQoL Sum: $F(1, 65) = 0.28, p = 0.60$, partial $\eta^2 = 0.004$).

Hypothesis 4. Changes in acceptance-based constructs over the course of treatment would correlate with change in QOL.

Overall, change in most acceptance-based constructs was not significantly related to change in EDQoL scores (see Table 2). However, increases in the ability to defuse showed moderate to strong correlations for nearly every subscale of the EDQoL, with greater increases in defusion correlating with greater increases in QOL. Additionally, improvements in several aspects of emotion regulation were significantly correlated with improvements in QOL in certain domains. Partial correlations controlling for change in EDE-Q Global scores showed a similar pattern of results; additionally, a significant correlation between access to effective emotion regulation strategies and improvements in psychological QOL emerged (see Table 2).

4. Discussion

The results of this study suggest that low levels of acceptance-related variables upon admission to treatment may partially account for some of the impairments in QOL observed among ED patients, and that improvements in certain acceptance-related variables, especially defusion, may predict improvements in QOL in some domains. These results are consistent with models of eating pathology suggesting that psychological inflexibility is a particularly relevant factor for EDs (Manlick, Cochran & Koon 2013; Masuda & Hill, 2013).

Moderate correlations were observed between several acceptance-related constructs and EDQoL scores at baseline when controlling for ED symptom severity. In particular, less impulse control difficulties was associated with better total, cognitive/physical, and financial QOL; greater access to emotion regulation strategies was associated with better total, financial, and work/school QOL; and greater ability to defuse was associated with better psychological QOL. These findings suggest that patients who are better able to defuse from distressing internal experiences may experience less impairment in the psychological domain as a result of their ED, indicating that defusion may be particularly relevant to the amount of impairment experienced. Additionally, patients with less impulse control difficulties and greater access to emotion regulation strategies may experience less impairment in QOL in numerous domains as a result of their ED, highlighting the importance of these aspects of emotion regulation to the amount of impairment experienced as a result of the ED. Contrary to hypotheses, psychological flexibility and several other aspects of emotion regulation (e.g. Nonacceptance of Emotional Responses, Difficulties Engaging in Goal-Directed Behavior, Lack of Emotional Awareness, and Lack of Emotional Clarity) did not appear to be

Table 1

Baseline correlations (Column 1) and baseline partial correlations, controlling for EDE-Q global (Column 2).

	DERS non-acceptance ^a		DERS goals ^a		DERS impulse ^a		DERS aware ^a		DERS strategy ^a		DERS clarity ^a		DDS total ^a		AAQ total ^a	
EDQOL Psychological ^b	0.31**	0.15	0.22*	0.03	0.25*	0.11	−0.20	−0.08	0.38**	0.20	0.10	−0.11	−0.53**	−0.28**	0.46**	0.14
EDQOL Cognitive/Physical ^b	0.25*	0.12	0.33**	0.22	0.32**	0.25*	−0.12	−0.04	0.32**	0.17	0.14	0.04	−0.34**	−0.10	0.30**	0.07
EDQOL Financial ^b	0.03	0.01	0.06	0.03	0.23*	0.26*	0.08	0.04	0.20	0.21*	0.10	0.03	−0.03	0.06	0.07	0.06
EDQOL Work/School ^b	0.20	0.13	0.12	0.09	0.14	0.06	−0.10	−0.07	0.28**	0.23*	0.04	0.01	−0.14	−0.01	0.10	−0.12
EDQOL Sum ^b	0.23*	0.13	0.21*	0.14	0.33**	0.25*	−0.07	0.04	0.39**	0.30*	0.07	0.01	−0.31**	−0.07	0.28**	0.04

^a **DERS Non-Acceptance:** Difficulties in Emotion Regulation Scale, Nonacceptance of Emotional Responses subscale; **DERS Goals:** Difficulties in Emotion Regulation Scale, Difficulties Engaging in Goal-Directed Behavior subscale; **DERS Impulse:** Difficulties in Emotion Regulation Scale, Impulse Control Difficulties subscale; **DERS Aware:** Difficulties in Emotion Regulation Scale, Lack of Emotional Awareness subscale; **DERS Strategy:** Difficulties in Emotion Regulation Scale, Limited Access to Emotion Regulation Strategies subscale; **DERS Clarity:** Difficulties in Emotion Regulation Scale, Lack of Emotional Clarity subscale; **DDS total:** Drexel Defusion Scale total score; and **AAQ-II total:** Acceptance and Action Questionnaire II total score. All DERS Subscales: (Gratz & Roemer, 2004); DDS: (Forman et al., 2012); AAQ-II: (Bond et al., 2011).

^b Higher scores on the EDQOL reflect worse impact of the ED on QOL. Higher scores on the DDS reflect greater ability to defuse. Higher scores on all DERS subscales reflect poorer emotion regulation. Higher scores on the AAQ-II reflect greater psychological inflexibility.

* $p < 0.05$.

** $p < 0.01$.

Table 2

Change in acceptance-based constructs related to change in EDQOL scores (Column 1) and partial correlations controlling for EDE-Q global scores (Column 2).

	DERS Non-acceptance ^a		DERS goals ^a		DERS impulse ^a		DERS aware ^a		DERS strategy ^a		DERS clarity ^a		DDS total ^a		AAQ total ^a	
EDQOL Psychological ^b	0.07	0.10	−0.03	0.10	−0.05	−0.20	0.16	0.26	0.10	0.33*	0.18	0.22	0.28*	0.36*	0.12	0.06
EDQOL Cognitive/Physical ^b	0.22*	0.23	−0.13	−0.17	0.02	0.08	0.24**	0.28*	0.02	0.02	0.11	0.11	0.08	0.18	0.12	0.09
EDQOL Financial ^b	0.36**	0.31*	0.39*	0.44**	0.30*	0.35*	0.03	0.03	0.38**	0.46**	0.11	0.11	0.65**	0.64**	0.15	0.09
EDQOL Work/School ^b	0.21	0.06	0.21	0.22	0.14	<0.01	0.13	<0.01	0.23	0.19	0.05	0.12	0.38**	0.31*	0.19	0.16
EDQOL Sum ^b	0.06	0.09	0.21	0.11	0.13	0.03	0.29*	0.25	0.12	0.06	0.07	0.06	0.34**	0.35**	0.18	0.07

^a **DERS NonsAcceptance:** Difficulties in Emotion Regulation Scale, Nonacceptance of Emotional Responses subscale; **DERS Goals:** Difficulties in Emotion Regulation Scale, Difficulties Engaging in Goal-Directed Behavior subscale; **DERS Impulse:** Difficulties in Emotion Regulation Scale, Impulse Control Difficulties subscale; **DERS Aware:** Difficulties in Emotion Regulation Scale, Lack of Emotional Awareness subscale; **DERS Strategy:** Difficulties in Emotion Regulation Scale, Limited Access to Emotion Regulation Strategies subscale; **DERS Clarity:** Difficulties in Emotion Regulation Scale, Lack of Emotional Clarity subscale; **DDS total:** Drexel Defusion Scale total score; and **AAQ-II total:** Acceptance and Action Questionnaire II total score. All DERS Subscales: (Gratz & Roemer, 2004); DDS: (Forman et al., 2012); AAQ-II: (Bond et al., 2011).

^b Change on EDQOL is scored such that higher scores reflect greater improvements in QOL. Higher change scores on the DDS reflect greater improvements in the ability to defuse. Higher scores on all DERS subscales reflect greater improvements in emotion regulation. Higher change scores on the AAQ-II reflect greater improvements in psychological inflexibility.

* $p < 0.05$.

** $p < 0.01$.

predictive of baseline QOL, suggesting that these variables may be less relevant than initially expected.

Significant changes were observed in several EDQOL subscales over the course of treatment. Large declines were observed in financial and work/school QOL, which is most likely a byproduct of treatment occurring at a residential treatment facility where, in addition to accruing treatment costs, most patients were unable to engage in their normal work/school activities. The lack of an observed change in physical/cognitive QOL may reflect that the relatively short duration of treatment (e.g., average of 28 days) did not provide sufficient time for patients to make meaningful enough gains in these domains to improve QOL. Despite the relatively short duration of treatment, however, large improvements were observed in psychological QOL, indicating the ED symptoms were impacting patients' psychological health and functioning to a lesser degree at discharge as compared to pre-treatment.

The hypothesis that individuals in the TAU+ACT condition would exhibit greater improvements in QOL than individuals in the TAU condition was not supported. Given that the primary goal of ACT is to increase psychological flexibility, and change in psychological flexibility was not associated with improvements in QOL, the results suggest that ACT may be less useful than initially anticipated in improving QOL in this population. Alternatively, it is possible that the relatively limited amount of ACT-specific skills training that participants in the TAU+ACT condition received was not powerful enough to add incremental efficacy above and beyond TAU alone. If true, one would expect to observe

a greater difference in improvements in QOL between conditions with additional ACT treatment. It is also possible that, due to being in residential treatment, individuals in the TAU+ACT group lacked sufficient opportunity to utilize their ACT skills in ways that would improve QOL (e.g., focusing on domains of life beyond eating and appearance), and that improvements in QOL would emerge once individuals left the treatment environment. It should be noted that participants in both conditions showed strong improvements in defusion, which, given the significant association found between increases in defusion and improvements in QOL, may have contributed to improved psychological QOL in both conditions. Although participants in the TAU condition were not expected to exhibit increases in ability to defuse as they did not receive specific training in this skill, it is possible that defusion improved in the TAU group due to other, CBT-like components of TAU, which have previously been shown to improve ability to defuse from distressing internal experiences (Hayes et al., 2012).

Although, contrary to our hypotheses, changes in most acceptance-related variables were not significantly related to changes in EDQOL scores, improvement in the ability to defuse from distressing internal experiences was strongly associated with changes in almost all domains of EDQOL such that greater ability to defuse correlated with greater increases in QOL. This finding, which remained when controlling for change in ED severity, suggests that the ability to defuse is closely associated with how strongly ED symptoms impact QOL, and raises the possibility that increases in the ability to defuse may serve as a mechanism of action for improvement in QOL among ED patients. Even if an

individual is unable to change or remove her distressing emotions and cognitions, if she can obtain psychological “distance” from these aversive internal experiences and engage in values-consistent behaviors despite the presence of distressing emotions and thoughts, the impact of these aversive internal experiences on QOL is reduced. Given that many patients experience some level of eating pathology for many years even with treatment, increasing individuals’ ability to defuse may reduce the impact of any remaining symptoms on QOL.

Improvements in several aspects of emotion regulation also remained moderately to strongly associated with improved QOL in certain domains after controlling for change in ED severity. Of note, improvements in access to emotion regulation strategies was related to improved psychological QOL, indicating that increasing patients’ access to emotion regulation strategies may reduce the impact of ED symptoms on QOL in the psychological domain. Interestingly, although financial QOL declined for most patients over treatment, positive relationships were observed between several aspects of emotion regulation and financial QOL, suggesting that, broadly, a greater ability to regulate emotions may help patients feel better about any existing financial difficulties. Improvements in emotional awareness were also associated with improvements in cognitive/physical QOL; this result may suggest that gains in emotional awareness contribute to perceived improvements in some of the cognitive symptoms associated with EDs.

4.1. Limitations

Several limitations to the present study should be noted. The data for the present study was obtained from a treatment study conducted at a residential treatment center that utilizes an eclectic treatment approach. Thus, patients in the TAU condition could have received some ACT-consistent treatment. Also, the existing treatment structure limited the amount of ACT-specific training that patients in the TAU+ACT condition could receive. In addition, few selection criteria were used for participation in this study, resulting in considerable co-morbidity and prior treatment histories among participants. The attrition rate was also relatively high. The use of self-report measures and correlation analyses limits the ability to control for alternative explanations for the observed relationships, including response biases, experimenter demands, or general affectivity. Lastly, we only examined the relations among acceptance-based constructs and QOL from pre- to post-treatment, and were thus unable to examine how these relationships may change with time and once patients leave a treatment setting. Additional research assessing change in QOL after discharge or during outpatient treatments, where patients may have a greater ability to enact change in many of the domains assessed by the EDQoL, is likely to be beneficial. Future research should further investigate the association between acceptance-related constructs and the influence of ED symptoms on QOL using a more tightly-controlled research design with more objective measurement tools, and follow patients for a greater period of time.

5. Conclusions

The present research contributes to the existing literature by indicating that higher levels of defusion, impulse control, and access to emotion regulation skills at admission to ED treatment may be associated with lower impairment in QOL regardless of ED severity, and that improvements in key constructs—especially the ability to defuse from distressing experiences—may lead to improved QOL among ED patients. However, the current study did not support hypothesized relationships between other

acceptance-based constructs, such as psychological flexibility, and QOL, and suggested that an ACT-based treatment in a residential setting is not beneficial for improving QOL above standard treatment. These results suggest that psychological flexibility may play less of a role in QOL than initially suspected, although replication is needed to support this claim. Additional research is needed to further investigate the relationships among acceptance-related variables and the impact of ED symptoms on QOL, as well as how these factors interact and change in response to greater doses of ACT-based treatments or treatment administered on an outpatient basis.

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