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Correlates of Weight-related Quality of Life among Individuals with Binge Eating Disorder Before and After Cognitive Behavioral Therapy

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Abstract

Individuals with obesity and binge eating disorder (BED) report poorer weight-related quality of life (WRQOL) compared to individuals with obesity alone. Cognitive behavioral therapy (CBT), the best available treatment for BED, does not consistently produce weight loss or improvements in weight QOL. The purpose of the current study was to examine baseline and longitudinal associations between eating-related and psychosocial variables and dimensions of weight QOL. We examined associations between predictor variables, including body mass index (BMI), eating disorder (ED) psychopathology, and psychosocial factors, in relation to three dimensions of WRQOL among 171 patients whom received CBT for BED. Participants completed interviews and self-report measures at baseline prior to CBT and at end of treatment. At baseline the

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following associations were significant: BMI, ED psychopathology, and self-esteem were associated with weight-related self-esteem; gender, BMI, and self-esteem were associated with weight-related public distress (i.e., stigma and worry in public because of one's weight); and age, BMI, and ED psychopathology were associated with weight-related physical function. At end of treatment, the following associations were significant: changes in ED psychopathology and coping predicted weight-related self-esteem; changes in coping and self-esteem predicted weight-related public distress; and changes in BMI and subjective binge eating predicted weight-related physical function. Overall, changes in a number of ED and associated symptoms were associated with improvements in WRQOL.

Keywords

binge eating disorder; obesity; quality of life; cognitive behavioral therapy

Binge eating disorder (BED), the most prevalent eating disorder (ED), is strongly associated with severe obesity (Hudson, Hiripi, Kessler, & Pope, 2007). The prevalence of BED among individuals with obesity seeking weight-loss treatment ranges from 1.3%–30.1% (Dingemans, Bruna, & Van Furth, 2002; Kalarchian et al., 2007). Both obesity and BED are associated with substantially decreased health-related quality of life (QOL) (Andersen, Karlsen, Kolotkin, 2014; Hassan, Joshi, Madhavan, & Amonkar, 2003; Masheb & Grilo, 2004). For example, individuals with obesity, regardless of BED status, report poorer physical health-related QOL compared to U.S. norms (De Zwaan et al. (2002). However, those with obesity only reported lower mental health-related QOL if they had co-occurring BED. Furthermore, individuals with both obesity and BED report the lowest physical and mental health-related QOL in comparison to individuals with only obesity, only BED, or neither obesity nor BED; in general, obesity is more strongly associated with impaired physical health-related QOL, whereas BED is more strongly associated with impaired mental health-related QOL (Perez and Warren, 2012).

Weight-related QOL (WRQOL) involves the impact of one's weight or size on several domains including physical function, self-esteem, sexual life, public distress (i.e., stigma and worry in public because of one's weight), and work (Kolotkin, Crosby, Kosloski, & Williams, 2001). Individuals with BED and obesity report poorer WRQOL than individuals with obesity and no BED (de Zwaan et al, 2002; Kolotkin et al., 2004; Rieger, Wilfley, Stein, Marino, & Crow, 2005). A study of individuals with BED and obesity reports poorer scores in WRQOL domains, except physical function, as well as total WRQOL compared to individuals with only obesity (Rieger et al., 2005). Therefore, evidence suggests that having comorbid BED and obesity is associated with greater QOL impairment than having obesity alone, which may be due, in part, to the fact that individuals with BED typically present with high rates of psychiatric disorders (e.g., mood and anxiety disorders), somatic symptoms, and body image concerns (Grilo, White, & Masheb, 2009; Hrabosky, Masheb, White, & Grilo, 2007; Hudson et al., 2017; Thornton et al., 2017).

Weight loss has been found to be effective for improving WRQOL among individuals with obesity without co-existing EDs (Astrup et al., 2008; Kaukua, Pekkarinen, Sane, &

Mustajoki, 2002; Kolotkin, Chen, Klassen, Gilder, & Greenway, 2015; Kolotkin, Crosby, Williams, Hartley, & Nicol, 2001; Kolotkin, Gadde, Peterson, & Crosby, 2016). Achieving weight loss in individuals with BED has been difficult (Blaine & Rodman, 2007) although certain psychological treatments have been shown to reduce binge eating and associated eating-disorder psychopathology (Grilo, 2017; Iacovino, Gredysa, Altman, & Wilfley, 2012; Wilson, Grilo, & Vitousek, 2007). Cognitive behavioral therapy (CBT), the best-established psychotherapeutic treatment for BED (Iacovino et al., 2012), generally produces robust reductions in binge-eating but does not result in weight loss (Grilo, Masheb, & Wilson, 2005; Grilo, Masheb, Wilson, Gueorguieva, & White, 2011; Peterson, Mitchell, Crow, Crosby, & Wonderlich, 2009). Little is known regarding treatment effects on WRQOL in BED. One randomized clinical trial examining CBT for BED found that individuals who received CBT did not report significantly different WRQOL at end of treatment (EOT) compared to a wait list control group (Peterson et al., 2009). However, CBT has been shown to lead to improvement in a variety of psychological and behavioral symptoms including cognitive and behavioral ED symptoms, mood, self-esteem, and coping (Grilo et al., 2005; Peterson et al., 2009). Improvement in these symptoms may be associated with improved WRQOL independent of weight, by improving self-image, weight and shape concerns, mood, and binge eating.

The ways in which changes in weight, ED psychopathology, and psychosocial factors are associated with WRQOL during and after treatment is also poorly understood. In individuals with both obesity and BED, small-to-moderate correlations between body mass index (BMI) and all WRQOL domains have been found, but only statistically-significant correlations between BMI and public distress and physical function (Rieger et al., 2005). In a sample of patients with obesity (17% of which had co-occurring BED) evaluated for bariatric surgery, greater eating psychopathology was associated with lower scores on all dimensions of WRQOL (de Zwaan et al., 2002). Dimensions of WRQOL are also associated with more depressive symptoms, psychological problem severity, and lower self-esteem (Kolotkin & Crosby, 2002; Kolotkin et al., 2004). However, most research has only examined baseline correlates of WRQOL or changes in WRQOL after obesity treatment. One prospective naturalistic study of bariatric surgery patients found that improvements in depressive symptoms were significantly related to improvements in QOL (Masheb et al., 2007). In a clinical trial for obesity management, changes in depressive symptoms were significant mediators of improved WRQOL (Kolotkin et al., 2016).

The extant research shows that psychosocial variables are related to WRQOL and changes in psychosocial variables after obesity treatment are related to improved WRQOL. However, there is a paucity of research examining correlates of WRQOL in BED and after CBT for BED. The purpose of this study was to examine associations among BMI, ED psychopathology, and psychosocial variables in relation to WRQOL in adults with BED. We also sought to examine how changes in ED psychopathology and psychosocial factors are associated with changes in WRQOL, controlling for baseline BMI as well as weight change at EOT. We hypothesized that: (1) more severe obesity and BED symptoms (i.e., higher objective binge eating, subjective binge eating, and global ED psychopathology) would be associated with lower WRQOL scores at baseline; (2) treatment-related changes in BMI and BED symptoms would be related to greater change in WRQOL scores at EOT; (3)

psychosocial factors, i.e., more depressive symptoms, lower self-esteem, and poorer coping skills at baseline and changes at EOT would be associated with lower WRQOL scores at baseline and more changes in WRQOL at EOT.

Method

Participants and Procedure

Data were derived from a randomized clinical trial that evaluated the efficacy of CBT for BED. Participants ($n = 259$) were randomized to one of three active treatment groups (therapist-led, therapist-assisted, or self-help) or a wait list control (Peterson et al. 2009). Eligibility required meeting full criteria for *DSM-IV* BED and having a BMI ≥ 25 kg/m². Participants completed measures at baseline, midpoint assessment, and EOT (20 weeks). Details regarding the study have been described previously (Peterson et al., 2009). This study was reviewed and approved by Institutional Review Boards at each site.

Because we were interested in examining associations among predictors and QOL after CBT for BED, data for the wait list control group was not used in the current analyses ($n = 69$). For both baseline and longitudinal analyses, the final analytic sample was 171 after exclusion of 19 individuals who did not complete the primary outcome variable (Impact of Weight on Quality of Life-Lite [IWQOL-Lite]). The final sample consisted of 158 (92.4%) women and 13 men (7.6%), with mean age = 47.14 ($SD = 10.20$; Range = 21 – 65). The majority were White (96.5%). Slightly more than half of participants had a bachelor's degree or higher. The mean BMI at baseline was 39.47 kg/m² ($SD = 8.41$) and the mean BMI at EOT was 39.61 kg/m² ($SD = 8.65$).

Measures

IWQOL-Lite (Kolotkin et al., 2001)—The IWQOL-Lite measures five dimensions of quality of life related to one's weight. In order to minimize statistical tests, we used three subscales in the current study related to psychological and physical function: self-esteem, public distress, and physical function; the work and sexual life subscales were not used. The 7-item self-esteem subscale assesses self-esteem in relation to one's weight (e.g., "Because of my weight, I don't like myself"). The 5-item public distress subscale measures stigma and worry in public because of one's weight (e.g., "Because of my weight, I experience ridicule, teasing, or unwanted attention"). The 11-item physical function subscale assesses day-to-day physical function/mobility (e.g., "Because of my weight, I have difficulty getting up from chairs"). Scores range from 0–100, with higher scores indicating better WRQOL on all subscales. Thus, similar to other subscales, higher scores on public distress indicate better WRQOL: specifically, *less* worry and stigma when out in public, despite the name of this subscale. The IWQOL-Lite demonstrates adequate psychometric properties among individuals with obesity (Kolotkin et al., 2001). Cronbach's alphas were .93, .91, and .91 for physical function, self-esteem, and public distress, respectively, at baseline and .93, .93, and .92 for physical function, self-esteem, and public distress, respectively, at EOT.

BMI—Anthropometric measurements of height and weight were collected. BMI was calculated using the standard formula for BMI (Keys, Fidanza, Karvonen, Kimura, & Taylor, 1972).

Eating Disorder Examination (EDE; Fairburn, Cooper, & O'Connor, 2008)—The EDE is a semi-structured interview that assesses ED symptoms and psychopathology with a focus on the previous 28 days. The EDE assesses the frequency of different forms of overeating, including *objective binge-eating episodes (OBE; i.e., unusually large quantities of food with a subjective sense of loss of control)* and *subjective binge-eating episodes (SBE; i.e., episodes of loss of control while eating “subjectively” large quantities)*. The EDE also comprises four subscales (*dietary restraint, eating concern, weight concern, and shape concern*) the mean of which is a total global score reflecting ED psychopathology. Items are rated on 7-point forced-choice scales (range 0–6), with higher scores reflecting greater severity/frequency. The EDE has well-established inter-rater and test-retest reliability (Grilo, Masheb, Lozano-Blanco, & Barry, 2004). Interrater reliability based upon intraclass correlations coefficients was .99 for the global subscale, .99 for OBEs, and .96 for SBEs.

Inventory of Depressive Symptomatology (IDS; Rush et al., 1986)—The IDS-SR is a 30-item scale that measures depressive symptoms (e.g., sadness, loss of interest). Participants rate items on a 0 to 3 severity scale, e.g., 0 (*I do not feel sad*), 1 (*I feel sad less than half the time*), 2 (*I feel sad more than half the time*), and 3 (*I feel sad nearly all of the time*). Higher scores indicate more depressive symptoms. The IDS-SR is strongly associated with other established measures of depressive symptoms (Rush et al., 2004). Cronbach's alphas were .85 at baseline and .88 at EOT in the current sample.

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965)—This is the most widely used scale to assess global self-esteem. Participants respond to 10-items on a scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). A sample item is: “At times I think I am no good at all.” Higher scores indicate poorer self-esteem. The RSES has shown excellent psychometric properties (e.g., Sinclair et al., 2010). Cronbach's alphas were .92 at baseline and .91 at EOT in the current sample.

Coping Scale for Bulimia Nervosa (CS-BN; Binford et al., 2005)—The CS-BN was used to measure coping strategies specific to BED. The CS-BN was modified for use with individuals with BED by removing “purging” from items and replacing “BN” with “BED.” The CS-BN measures dimensions of coping strategies including avoidant/alternative (e.g., avoided stressful situations), interpersonal (e.g., called a supportive friend), and cognitive (e.g., challenged unrealistic thoughts) strategies. Higher scores indicate more use of coping strategies. Participants rated 36 items on a scale ranging from 0 (*never*) to 3 (*frequently*). Cronbach's alphas were .92 at baseline and .93 at EOT in the current sample.

Statistical Analysis

The expectation-maximization (EM) algorithm was used to replace missing data. Approximately 11% of total values were missing; about one third of participants ($n = 105$) had complete data. The highest amount of missing data was coping at EOT (31.6%; $n = 54$).

followed by IWQOL-Lite subscales at EOT (25.1%; $n = 43$). When imputing the missing data, data from baseline and midpoint assessments (10 weeks into 20 week treatment) were used to calculate the missing values. Ordinary least squares (OLS) multiple regressions were used to examine variables associated with WRQOL subscales (i.e., self-esteem, public distress, and physical function). We first analyzed variables associated with WRQOL at baseline. Bivariate correlations were calculated between each WRQOL subscale and the explanatory variables. Then, OLS regressions were calculated including all variables that were correlated at $p \leq .10$ for each WRQOL factor. In the baseline OLS regressions, we controlled for age and gender. For Step 2, we examined how changes in the predictor variables (i.e., BMI, objective binge eating, subjective binge eating, global ED psychopathology, depressive symptoms, self-esteem and coping) were associated with WRQOL at EOT. Change scores were calculated for each predictor variable by subtracting an individual's baseline score from their EOT score. Bivariate correlations were calculated between each WRQOL and the change scores for the explanatory variables. OLS regressions were calculated including all variables that were correlated at $p \leq .10$ for each WRQOL subscale. In the EOT OLS regressions, we controlled for age, gender, baseline WRQOL score, and treatment group. Interactions between BMI and global ED psychopathology were examined as a predictor in each model, but removed because all were non-significant.

Results

Baseline Correlates of WRQOL Dimensions

Tables 1, 2, and 3 display the results for WRQOL self-esteem, public distress, and physical function scores, respectively. Women reported lower weight-related self-esteem scores than men. Higher BMI, global ED psychopathology, and general self-esteem scores were significantly associated with lower weight-related self-esteem scores. Women reported higher weight-related public distress scores than men. Higher BMI and general self-esteem were associated with higher weight-related public distress scores (i.e. less distress when out in public). Being older, greater BMI, and increased global ED psychopathology were related to lower weight-related physical function scores. Each of the three models explained a large proportion of variance (all $R^2 \geq .45$).

Association of Changes in Predictor Variables and WRQOL Dimensions at EOT

Table 4 displays the results for weight-related self-esteem at EOT. Higher baseline weight-related self-esteem score predicted weight-related self-esteem at EOT. More improvements in global ED psychopathology and smaller improvements in coping strategy use over the course of treatment predicted higher weight-related self-esteem scores at EOT. The addition of predictors in step 2 explained an additional 10% of the variance in weight-related self-esteem at EOT beyond age, gender, treatment, and baseline weight-related self-esteem score.

Table 5 displays the results for weight-related public distress at EOT. Higher baseline weight-related public distress score predicted weight-related public distress EOT. Older age, greater improvements in general self-esteem, and smaller improvements in coping strategy use over the course of treatment predicted improved weight-related public distress outcome at EOT. The addition of predictors in step 2 explained an additional 3% of the variance in

weight-related public distress score at EOT beyond age, gender, treatment, and baseline weight-related public distress score.

Table 6 displays the results for weight-related physical function at EOT. Higher baseline weight-related physical function score predicted weight-related physical function at EOT. Older age, and improvements in BMI and subjective binge eating predicted higher weight-related physical function score at EOT. The addition of predictors in step 2 explained an additional 6% of the variance in weight-related physical function score at EOT beyond age, gender, treatment, and baseline weight-related physical function score.

Discussion

In this study, both severity of obesity and ED psychopathology were important markers of WRQOL. BMI was associated with poorer self-esteem and physical function and more public distress related to weight at baseline. In addition, individuals with greater global ED psychopathology reported poorer self-esteem and physical function related to weight. Kolotkin et al. (2004) found that demographic (i.e., gender, age, BMI, and ethnicity) and psychological (i.e., depressive symptoms and distress) variables largely explained the association between BED status and WRQOL among men and women seeking treatment for obesity. The researchers surmised that BED itself does not seem to have a negative impact on WRQOL. The results of the current study suggest that greater severity of BED (global ED psychopathology) does have an independent impact on WRQOL. Thus, individual differences in severity of ED psychopathology in BED may be more closely associated with WRQOL than the categorical diagnosis of BED (see Kolotkin et al., 2004). Given these findings, therapies that address both weight and ED symptoms may be the most effective at increasing WRQOL among those with BED and co-occurring obesity.

EOT analyses showed that decreases in ED psychopathology were associated with improved self-esteem related to weight and decreases in subjective binge eating were associated with improved physical function related to weight. The finding for subjective binge eating is consistent with Latner, Vallance, and Buckett, (2008), who found that subjective binge eating was related to health-related QOL measure with the Short-form Health Survey. The primary purpose of CBT for BED is changes in objective binge eating, but changes in objective binge eating were not related to changes in WRQOL. This suggests the importance of addressing all forms of loss of control eating (i.e., not just objective binge eating); the importance of examining subjective binge eating has been previously advocated (Blomquist et al., 2014; Mond et al., 2010). Indeed, in a 24-month prospective study of bariatric surgery patients, loss of control eating (i.e., subjective binge episodes) and changes in such eating post-surgically were significant correlates of QOL (SF-36 measure) at 12- and 24-month follow-ups (White, Kalarchian, Masheb, Marcus, & Grilo, 2010).

General self-esteem is particularly salient in regards to the psychological aspects of WRQOL. Lower general self-esteem was associated with lower self-esteem and public distress related to weight at baseline, and increases in general self-esteem were related to improvements in public distress related to weight at EOT. Depressive symptoms were not a unique predictor of change in any areas of WRQOL. These findings for BED are at odds

with those reported for bariatric surgery patients in which improvements in depressive levels were significantly and robustly related to changes in health-related QOL (Masheb et al., 2007) and in a clinical trial for obesity management in which changes in depressive symptoms were significant mediators of improved WRQOL (Kolotkin et al., 2016).

Coping was not a unique predictor of WRQOL at baseline, but less improvements in coping skills during treatment emerged as a significant predictor of improvements in public distress and self-esteem outcomes related to weight. This is inconsistent with studies that have shown more positive coping to be an important longitudinal predictor of increased QOL (Hay et al., 2010; Hay & Williams, 2013). Additional analyses revealed that increases in cognitive coping strategies may have been driving this effect. It is possible that participants reported increased cognitive coping, but this in fact reflected more cognitive rumination and preoccupation about binge eating. For example, statements like ‘I reminded myself that binge-eating is dangerous’ and ‘I made myself have negative thoughts about binge-eating’ may have been endorsed as more cognitive coping, but in fact reflected psychopathological cognitive processes. Food-related cognitions, including negative preoccupation with food and food-related thought suppression, are strongly associated with binge eating (Mason & Lewis, 2015). These cognitive coping strategies may actually have the effect of making it more difficult to control binges, thus reducing QOL.

Psychosocial and ED variables had the largest effect on self-esteem related to weight at EOT and exhibited small effects on public distress and physical function related to weight at EOT. Because public distress related to weight is often tied to external, uncontrollable events such as discrimination (e.g., weight bias, stigmatizing experiences) (Udo & Grilo, 2016), these findings are not unexpected as, on average, weight losses were not achieved in CBT for BED in the current sample, and substantial weight losses do not typically occur with psychological treatment for obesity or BED. Similarly, psychosocial and ED factors may impact physical QOL by reducing psychosomatic concerns, but they may not address physical concerns related to body size (e.g., getting up from chairs) that would likely only be ameliorated by large reductions in weight.

Our findings indicated that improvements in WRQOL after CBT for BED are associated with amelioration of a variety of symptoms. In addition, significant correlates of WRQOL at baseline and correlates of QOL at EOT did not converge. BMI was one of the strongest correlates of WRQOL at baseline but changes in BMI only predicted improvement in physical WRQOL at EOT (perhaps not surprising given the limited weight changes). Change in coping skills emerged as a significant predictor of WRQOL at EOT (although in an unexpected direction) whereas at baseline, coping skills are less related to WRQOL than other factors such as ED psychopathology and weight.

Strengths of this study include the large sample size, rigorous assessment and intervention protocols of this RCT (Peterson et al., 2009), and novel statistical methods making use of the repeated data reflecting changes in the variables of interest. However, there were also notable limitations. The sample was largely female, White, and well-educated, which may limit generalizability of the findings. In addition, WRQOL is a complex construct that involves a number of experiences in daily life. Although we used a psychometrically sound

instrument to measure WRQOL, the IWQOL-Lite suffers from reporting biases (e.g., recall bias) inherent in self-report measures.

In conclusion, psychosocial variables and ED psychopathology are associated with some of the individual differences in WRQOL at baseline, and changes in some of these variables emerged as significant correlates of improvements at EOT in WRQOL achieved with CBT for BED in this study. Interventions that address ED symptoms, psychosocial problems, and weight may have the greatest impact on WRQOL among those with BED. For example, adding physical activity components to CBT for BED may be effective at increasing weight loss and reducing depressive symptoms in addition to improving ED psychopathology (Penedo & Dahn, 2005).

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Highlights

- Obesity and binge eating disorder are related to poor quality of life (QOL).
- We examined predictors of three dimensions of weight-related QOL.
- Associations were examined at baseline and after cognitive behavioral therapy (CBT).
- Increases in weight related QOL are associated with changes in a number of symptoms.

Table 1

Baseline Predictors of IWQOL-Lite – Self Esteem

	<i>B</i>	β	<i>p</i>	<i>R</i> ²	<i>F</i>
Step 1				.08	4.50***
Age	.48	.22	.005		
Gender	–12.54	–.15	.05		
Treatment	.19	.01	.93		
Step 2				.50	20.17***
Age	.24	.11	.06		
Gender	–16.06	–.19	.001		
Treatment	–.17	–.01	.91		
Body mass index	–.51	–.19	.001		
Objective binge eating	–.02	–.02	.79		
Global ED psychopathology	–8.43	–.32	<.001		
Depressive symptoms	–.30	–.15	.06		
Self-esteem	–3.69	–.33	<.001		

Note. IWQOL = Impact of Weight on Quality of Life; ED = eating disorder; Higher scores indicate better weight-related QOL.

Table 2

Baseline Predictors of IWQOL-Lite – Public Distress

	<i>B</i>	<i>β</i>	<i>p</i>	<i>R</i> ²	<i>F</i>
Step 1				.01	0.44
Age	.24	.09	.26		
Gender	−1.26	−.01	.88		
Treatment	.17	2.68	.95		
Step 2				.59	33.90***
Age	−.03	−.01	.83		
Gender	−17.12	−.16	.002		
Treatment	.97	.03	.55		
Body mass index	−2.46	−.74	<.001		
Global ED psychopathology	−2.10	−.06	.26		
Depressive symptoms	−.17	−.07	.33		
Self-esteem	−2.61	−.19	.006		

Note. IWQOL = Impact of Weight on Quality of Life; ED = eating disorder. Higher scores indicate better weight-related QOL.

Table 3**Baseline Predictors of IWQOL-Lite – Physical**

	<i>B</i>	<i>β</i>	<i>p</i>	<i>R</i> ²	<i>F</i>
Step 1				.05	2.85*
Age	-.50	-.21	.01		
Gender	6.00	.06	.40		
Treatment					
Step 2				.45	16.38***
Age	-.71	-.29	<.001		
Gender	-2.78	-.03	.63		
Treatment	.52	.02	.78		
Body mass index	-1.59	-.54	<.001		
Objective binge eating	-.16	-.10	.11		
Global ED psychopathology	-4.12	-.14	.04		
Depressive symptoms	-.34	-.15	.06		
Self-esteem	-1.53	-.12	.12		

Note. IWQOL = Impact of Weight on Quality of Life; ED = eating disorder. Higher scores indicate better weight-related QOL.

Table 4

Longitudinal predictors of IWQOL-Lite – Self-Esteem

	<i>B</i>	β	<i>p</i>	<i>R</i> ²	<i>F</i>
Step 1				.55	52.84***
Age	.20	.08	.15		
Gender	4.54	.05	.38		
Treatment	-1.15	-.04	.49		
Baseline IWQOL-Lite – Self-esteem	.85	.73	<.001		
Step 2				.65	46.59***
Age	.12	.05	.34		
Gender	3.47	.04	.44		
Treatment	-1.38	-.04	.35		
Baseline IWQOL-Lite – Self-esteem	.82	.71	<.001		
Body mass index	-.52	-.04	.41		
Global ED psychopathology	-8.26	-.27	.001		
Coping	-.27	-.13	.009		

Note. IWQOL = Impact of Weight on Quality of Life; ED = eating disorder. Higher scores indicate better weight-related QOL.

Table 5

Longitudinal Predictors of IWQOL-Lite – Public Distress

	<i>B</i>	β	<i>p</i>	<i>R</i> ²	<i>F</i>
Step 1				.71	98.95***
Age	.38	.15	.001		
Gender	3.47	.04	.41		
Treatment	-.21	-.01	.88		
Baseline IWQOL-Lite – Public distress	.76	.81	<.001		
Step 2				.74	58.45***
Age	.38	.15	.001		
Gender	4.31	.04	.29		
Treatment	-.07	-.002	.96		
Baseline IWQOL-Lite – Public distress	.72	.77	<.001		
Body mass index	-.91	-.07	.11		
Global ED psychopathology	-1.04	-.03	.45		
Coping	-.25	-.11	.008		
Self-esteem	-1.90	-.11	.009		

Note. IWQOL = Impact of Weight on Quality of Life; ED = eating disorder. Higher scores indicate better weight-related QOL.

Table 6

Longitudinal Predictors of IWQOL-Lite – Physical Function

	<i>B</i>	β	<i>p</i>	<i>R</i> ²	<i>F</i>
Step 1				.62	67.51***
Age	.30	.13	.008		
Gender	-.57	-.01	.89		
Treatment	.43	.02	.75		
Baseline IWQOL-Lite – Physical function	.73	.80	<.001		
Step 2				.68	33.40***
Age	.26	.11	.02		
Gender	-1.63	-.02	.68		
Treatment	.43	.02	.74		
Baseline IWQOL-Lite – Physical function	.71	.78	<.001		
Body mass index	-1.23	-.11	.03		
Depressive symptoms	-.19	-.07	.18		
Subjective binge eating	-.27	-.12	.01		
Global ED psychopathology	-2.39	-.09	.08		
Coping	-.12	-.07	.17		
Self-esteem	-.28	-.02	.72		

Note. IWQOL = Impact of Weight on Quality of Life; ED = eating disorder. Higher scores indicate better weight-related QOL.