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Abstract

Objective: Ten session cognitive behavioural therapy (CBT-T) for eating disorders is designed to reduce barriers to treatment, including cost, therapist expertise, and lengthy wait lists. The current study aimed to replicate the first case series, evaluating the effectiveness of CBT-T in a sample of non-underweight clients, delivered by trainee psychologists under expert supervision.

Method: CBT-T was delivered to 26 clients in an outpatient setting. Outcomes included eating disorder cognitions and behaviours, quality of life, and general psychopathology. Analyses adopted a completer and intention-to-treat (ITT) approach to data analysis, using multi-level modelling.

Results: Significant improvements were found for the majority of outcomes from baseline to post-treatment and at one- and three-month follow-up. Effect sizes at post-treatment and follow-up from baseline were typically medium to large.

Discussion: Results support the effectiveness of CBT-T as a treatment for non-underweight eating disorder clients. Results were also comparable to longer versions of CBT for eating disorders and to outcomes delivered by experienced therapists. Longer follow-ups and use of randomised controlled trial designs are required to confirm the efficacy of CBT-T.

Key Words: Eating disorders; cognitive-behavioural therapy; brief; remission; abstinence

Key Points:

- In an Australian setting using novice therapists, results from an initial evaluation of CBT-T were replicated for the first time.
- Results achieved by novice therapists under supervision were comparable to longer versions of CBT-ED delivered by expert therapists.
- Large reductions in eating disorder cognitions and behaviours and in negative affect were observed from baseline to post-treatment. Results were largely maintained after a three-month follow-up.

Ten-session cognitive behaviour therapy (CBT-T) for eating disorders: Outcomes from a pragmatic pilot study of Australian non-underweight clients

For non-underweight eating disorders, the 2017 National Institute for Health and Care Excellence (NICE) guidelines recommend that guided self-help be offered as frontline treatment (cognitive behavioural self-help materials for eating disorders supplemented with 4 to 9 supportive sessions of 20 minutes duration over 16 weeks). If after 4 weeks of treatment this appears to be unacceptable, contraindicated or ineffective, then 20 sessions of cognitive behavioural therapy for eating disorders (CBT-ED) over 20 weeks is recommended as the next step (NICE, 2017). The four-session review is recommended given a large body of evidence showing that early change in eating disorder symptoms predicts good outcome (Vall & Wade, 2015).

In the Australian health care system there are significant barriers impeding progression from guided self-help to CBT-ED. First, rebates are available for only 10 sessions per calendar year under the Better Access to Mental Health Care through the Medicare Benefits Schedule initiative (Australian Government, 2015). Second, as few as 8% of individuals requiring eating disorder treatment receive it (Hart, Granillo, Jorm, & Paxton, 2011). Generally, people with a mental illness in Australia struggle to access appropriate health care. This is due in part to insufficient numbers in the workforce with the appropriate skills and geographical distribution to meet patient need (Mental Health Workforce Advisory Committee, 2011). Ethically these barriers require attention, given that rapid access to appropriate treatment impacts on outcome. For example, young people with bulimia nervosa who were offered immediate online CBT engaged more and had better outcomes than those who were given the same program after a three-month wait (Sánchez-Ortiz et al., 2011). Similarly, a transdiagnostic study of CBT in eating disorders in Western Australia found that longer times spent on a waiting list led to greater treatment drop-out when treatment was finally offered (Carter et al., 2012).

In order to overcome similar barriers in the United Kingdom (UK), Waller et al. (2018) developed a 10-session cognitive behavioural therapy (CBT-T) that addresses the key elements of CBT-ED (e.g. collaborative weighing, regular eating, body image work; Fairburn, 2008; Waller et al., 2007) for non-underweight clients. CBT-T is a manualised treatment designed for delivery by novice therapists, such as provisional psychologists who are undergoing training in postgraduate clinical psychology programs and have access to expert supervision. A case series of 106 non-underweight clients in the UK where CBT-T was delivered under supervision by clinical assistants (with Bachelors level psychology degrees)

demonstrated good behavioural, cognitive, and secondary (depression, anxiety) outcomes at post-treatment and three-month follow-up (Waller et al., 2018). Rates of symptom abstinence and remission were commensurate to efficacy and effectiveness trials of longer versions of CBT-ED (e.g. Byrne, Fursland, Allen, & Watson, 2011; Fairburn et al., 2009; Knott, Woodward, Hoefkens, & Limbert, 2015; Turner, Marshall, Stopa, & Waller, 2015; Waller et al., 2014). This is consistent with research in other clinical areas, showing that novice therapists, under supervision, are able to deliver outcomes comparable to clinical trials using experienced therapists (e.g. Öst, Karlstedt, & Widén, 2012; Zandberg & Wilson, 2013).

The aim of the current study is to replicate Waller et al.'s (2018) case series in an Australian context. This approach conforms to the Medical Research Council (MRC) guidance on developing and evaluating complex interventions (Craig et al., 2008) that complex interventions should be developed in a systematic manner (including use of pilot studies) prior to conducting randomised controlled trials (Craig et al., 2008). Replicability is a critical issue in psychological science (Open Science Collaboration, 2015). It was hypothesised that significant reductions in behavioural and cognitive eating disorder symptoms would be found, with abstinence and remission rates comparable to Waller et al. (2018) and effectiveness trials of CBT-ED and guided self-help using CBT (CBT-GSH).

METHOD

Participants

A total of 35 participants (aged ≥ 16 years and body mass index [BMI] > 17.5) were assessed for suitability for outpatient CBT-T treatment. Participants were excluded if they had a severe physical or psychiatric condition that would interfere with treatment engagement (e.g., high suicidality), if they were already receiving psychotherapy for an eating disorder, or if they had difficulty speaking or understanding English. Thirty-three were offered CBT-T (two were already receiving psychotherapy for an eating disorder and thus were ineligible) and a total of 26 (79%) started CBT-T (see **Figure 1**). In this latter group, the mean age was 28.73 years (SD = 9.57; range 16.41 - 51.49), and the mean BMI was 27.76 (SD = 7.96; range 19.80 - 52.40). The majority were female (96.2%) and all participants identified as being Caucasian. Diagnosis, using DSM-5 criteria (American Psychiatric Association, 2013), was assessed at baseline interview using a standardised outline of the issues to be covered (Wade & Pellizzer, In press) i.e., information regarding pertinent diagnostic features such as current eating, compensatory behaviours, body image disturbance. Self-report measures, such as the Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 2008) and Clinical Impairment Assessment (CIA; Bohn et al., 2008; Bohn & Fairburn, 2008), supplemented

information collected via clinical interviewing. Diagnosis was discussed and confirmed in supervision.

The initial assessment additionally included a thorough risk assessment to ensure participants with high suicidality were not included and comorbid issues were explored in an unstructured way. Comorbidities were assessed in more depth using the MINI International Neuropsychiatric Interview 6.0 (Sheehan et al., 1997) at the end of treatment session 1 (rather than at assessment to reduce burden). While comorbidities were common, no participants were excluded for having a severe psychiatric condition. The five most common comorbidities at pre-treatment were Generalized Anxiety Disorder (60%), Social Anxiety Disorder (52%), Major Depressive Disorder (28%), Panic Disorder with Agoraphobia (24%), and Agoraphobia (without Panic Disorder; 20%). In addition, over half of the sample (57.5%) were taking psychiatric medication (mostly antidepressants) and were asked to keep medication stable during the course of treatment.

Design

Participants completed measures at baseline (assessment session) and then again after a four-week waitlist period. The latter was designated the pre-treatment assessment (session 1). Further assessments took place at mid-treatment (session 4), post-treatment (session 10), and after one- and three-month follow-up.

Measures

BMI and frequency of disordered eating. Height was measured at the baseline assessment, and weight was measured collaboratively with participants every session as part of therapy. Weekly frequencies of objective bingeing, vomiting, and laxative abuse were obtained from daily food intake diaries. Clinical judgement was used to ensure correct classification of objective and subjective binges. Laxative and vomiting frequency were combined to create a total 'purging' variable, given the low occurrence of the former.

Global eating disorder psychopathology. The EDE-Q (Fairburn & Beglin, 2008) global score is calculated from 22 items that assess eating disorder psychopathology over the previous 28 days. Higher scores indicate greater eating disorder psychopathology. Subscales include Restraint, Eating Concern, Shape Concern, and Weight Concern. The EDE-Q has strong reliability and validity (Berg, Peterson, Frazier, & Crow, 2012; Fairburn & Beglin, 1994). Internal consistency of .78 (global score) was obtained in the present study.

Clinical impairment. The 16-item CIA (Bohn et al., 2008; Bohn & Fairburn, 2008) assesses psychosocial impairment due to eating disorder psychopathology. Items are summed to calculate a total score, with higher scores indicating greater psychosocial impairment. The CIA

has strong psychometric properties and correlates well with the global EDE-Q score, the measure it was designed to complement (Bohn et al., 2008). Internal consistency in the present study was .94.

Negative affect. The Depression Anxiety and Stress Scales short form (DASS21; Lovibond & Lovibond, 1995) is a 21-item measure of general psychopathology. Items are summed to calculate a total score, with higher scores indicating greater negative affect (Lovibond & Lovibond, 1995). The scale has good reliability and validity (Antony, Bieling, Cox, Enns, & Swinson, 1998). Internal consistency in the present study was .90.

Perceived confidence and suitability of treatment. To assess treatment expectations, participants were asked to respond to two questions using 100-point visual analogue scales 1) "How confident are you in this approach" and 2) "How suitable is this approach to you?"

Procedure

Following approval by the Institutional Research Ethics Committee, participants were recruited from consecutive referrals to the XXX. All participants gave informed consent and were aware that therapists were trainee psychologists. Participants attended an initial assessment appointment followed by a four week wait-list condition in which they received psychoeducation from a self-help book (Waller et al., 2010, p. 19-43). Each participant was reassessed and then received 10 weeks of CBT-T treatment (one session per week) and follow-up sessions at one and three months post-treatment (Waller et al., 2018). Treatment was ceased with slow responders at session 4, with a collaborative decision to seek alternative support until more active change could be tackled early in therapy. Three novice therapists administered both the assessments and treatment (i.e. participants continued with the therapist who provided their baseline assessment session) following training and received weekly or biweekly supervision from two authors (XX and XX). Training was brief and involved becoming familiar with the assessment and therapy materials and initial meetings with supervisors.

Statistical Analyses

Analyses were conducted with IBM Statistical Package for the Social Sciences, Version 22 (IBM Corp, 2013). Attrition was categorised as either being invited to leave/collaboratively deciding to end treatment (slow response to treatment) or dropping out (e.g. not attending sessions, leaving without discussion with therapist). Potential pre-treatment predictors of attrition were assessed with multinomial logistic regression using three groups (completers, invited to leave, and dropout). Treatment outcomes were assessed with multi-level modelling (MLM), enabling inclusion of cases with missing data via maximum likelihood estimation, using both completer and intention-to-treat (ITT) samples. For completer analyses, all drop-outs were

omitted. Effect sizes were calculated for within-group comparisons using Cohen's d. Bonferroni correction was applied for multiple comparisons.

Abstinence, remission, and 'good outcome' rates were calculated at post-treatment (session 10, EOT), one-month follow-up (FU1), and three-month follow-up (FU3). Abstinence was defined as having no bulimic behaviours (objective binges, vomiting, and laxative abuse) over the last 28 days as per the EDE-Q. Remission was defined as having an EDE-Q Global score no greater than one SD above the community mean (≤ 2.77) using Australian norms (Mond, Hay, Rodgers, & Owen, 2006), in addition to abstinence from bulimic behaviours. 'Good outcome' was used in the Fairburn et al. trials in 2009 and 2015 to describe those participants with a post-treatment score of < 1 SD above the community norm on the Eating Disorder Examination interview (EDE). Effectiveness studies have typically used the EDE-Q as a measure of 'good outcome', thus the present study considered 'good outcome' to be an EDE-Q Global score ≤ 2.77. Efficacy and effectiveness studies typically apply last observation carried forward for such analyses (Byrne et al., 2011; Fairburn et al., 2009; Knott et al., 2015; Signorini, Sheffield, Rhodes, Fleming, & Ward, 2018; Turner et al., 2015; Waller et al., 2014), thus the present study conformed to this approach for comparability.

RESULTS

Participant Flow and Attrition

Unacceptability, defined as those who actively declined the therapy when it was described in detail or those who did not attend the first treatment session, was demonstrated by 7 of the 33 participants offered CBT-T (21.21%). For the 26 participants who attended the first treatment session, confidence (M = 72.63, SD = 14.57) and suitability (M = 78.46, SD = 15.30) were both rated highly.

Attrition, defined as those who started treatment but who terminated prematurely, occurred for 13 of the 26 participants who started CBT-T (50%). Attrition was categorised into two groups: those where a collaborative decision was made with the therapist to leave treatment due to lack of engagement with therapy tasks (N = 3, 11.54%), and those who ceased therapy prematurely without discussion with the therapist i.e., dropped out (N = 10, 38.46%). See **Figure 1** for reasons for attrition. There were no significant predictors of attrition (see **Table 1**) however for purging there was insufficient power to calculate an Odd Ratio (OR) between completers and those invited to leave. However, completers were purging at baseline (M = 2.00, SD = 3.51) while those invited to leave were not (M = 0, SD = 0).

Symptom Change across the Four-Week Wait-List Period

For both ITT and completers, no significant differences were observed between baseline and pre-treatment for all variables (except for the Restraint subscale of the EDE-Q for ITT) and the majority of effect sizes were small (see **Table 2**).

Symptom Change across the Course of Treatment

There was no statistically significant change observed in BMI over the course of therapy for both completer $F(58.00) = 0.81$, $p = .55$ and ITT analyses $F(76.10) = 0.96$, $p = .45$. As shown in **Table 2**, completers had significant reductions in eating disorder cognitions from baseline and pre-treatment to mid- and post-treatment, with large effect sizes. Additionally, mean EDE-Q global and CIA scores fell below the clinical cut-offs (EDE-Q 2.77; CIA 16) by post-treatment. Post-hoc analyses were conducted on the EDE-Q subscales and demonstrated a similar pattern, however differences from baseline and pre-treatment to mid-treatment were not significant for the Shape and Weight Concern subscales. The largest effect sizes from baseline were observed for the Eating Concern subscale. While bingeing was significant overall, post-hoc comparisons were not (at $p < .01$). Purging was not significant. However, for both bingeing and purging, effects were large from baseline to mid- and post-treatment. Negative affect significantly reduced from baseline, pre- and mid-treatment to post-treatment, with a large effect (from baseline). The pattern of results was almost identical for ITT analyses, except the difference between objective bingeing from baseline to mid-treatment became significant.

Symptom Change during Follow-Up

Data for both one- and three-month follow-ups are presented in **Table 2.** For completers, both follow-up scores for eating disorder cognitions were not statistically different from post-treatment. Specifically, mean EDE-Q global and CIA scores remained under the clinical cut-off with very large effect size decreases from baseline. Similarly, EDE-Q subscales were not statistically different from post-treatment, large significant effects were observed from baseline to both follow-ups. For eating disorder behaviours, analyses from baseline to both follow-ups for completers were not significant. However, reductions in objective bingeing and purging from baseline to both follow-ups had large effect sizes. At the one-month follow-up, negative affect was significantly lower than at baseline, with a large effect. A large, non-significant difference occurred for negative affect at the three-month follow-up. ITT analyses demonstrated a similar pattern, however the difference between baseline and three-month follow-up for negative affect became significant and effect sizes for purging were medium rather than large.

Abstinence, Remission, and Good Outcome

Abstinence, remission, and good outcome are presented at post-treatment, one- and three-month follow-up in **Table 3**.

DISCUSSION

The primary aim of this study was to replicate Waller et al.'s (2018) case series in an Australian context. As hypothesised, significant reductions were observed for all variables (including negative affect) except bingeing and purging. Effect sizes were typically medium and large, suggesting non-significant findings may be due to reduced power. Notably, improvements for most variables were observed at mid–treatment, and post-treatment results were largely maintained at both follow-up points. Abstinence, remission, and good outcome rates were comparable to the initial pilot study and to efficacy and effectiveness studies of CBT-ED and CBT-GSH using both experienced and inexperienced therapists (Banasiak, Paxton, & Hay, 2005; Byrne et al., 2011; Cachelin et al., 2014; Carter & Fairburn, 1998; Fairburn et al., 2015; Fairburn et al., 2009; Knott et al., 2015; Rose & Waller, 2017; Signorini et al., 2018; Turner et al., 2015; Waller et al., 2014; Wilson, Wilfley, Agras, & Bryson, 2010; Zandberg & Wilson, 2013). Thus, this case series provides support for CBT-T as an efficacious, time efficient, and cost effective treatment for eating disorders.

One note of caution is that the attrition rate in the present study was 50%, exceeding the 31.2% rate reported by Waller et al. (2018). However, the attrition rate is within the range reported by comparable studies evaluating CBT-ED with predominantly experienced therapists, between 10.3% and 50% (Byrne et al., 2011; Fairburn et al., 2015; Fairburn et al., 2009; Knott et al., 2015; Rose & Waller, 2017; Signorini et al., 2018; Turner et al., 2015; Waller et al., 2014). Furthermore, if only considering dropouts (and not those slow responders who were invited/collaboratively decided to leave) the attrition rate falls to 38.5%, sitting comfortably in the range reported by previous studies. When comparing completers with the two types of attrition, there were no significant predictors. However, we are unable to rule out purging as a predictor given there was insufficient power to run the analysis between completers and those invited to leave. At the time of this case series the first author had not yet completed clinical placements and the other two therapists involved had only completed their first. Thus, inexperience may have contributed to attrition. It may be helpful for novice therapists new to the therapy to "shadow" more experienced novice therapists until they can better manage engagement, or that some intensive training should be offered before new therapists take on clients.

While attrition in the present study was high, it was commensurate to previous effectiveness studies thus exploring predictors of attrition is an important area for future

research. In the initial evaluation of CBT-T, similar variables were assessed as predictors of attrition but working alliance and personality beliefs were additionally included (Waller et al., 2018). Only anxiety was found to be a significant predictor of attrition as participants with greater anxiety were less likely to drop out (Waller et al., 2018). A meta-analysis and systematic review found only two significant predictors of drop out: higher binge/purge behaviours and lower motivation at baseline (Vall & Wade, 2015). However, bingeing or purging at baseline were not significant predictors of attrition in the present study nor the initial examination of CBT-T (Waller et al., 2018). A subsequent paper analysed data from this case series combined with a second case series and did not find motivation (measured as readiness to change and self-efficacy) to be a significant predictor of attrition (Pellizzer, Waller, & Wade, 2018). While motivational enhancement has been suggested as means to improve attrition, it has been extensively trialled with eating disorders and reviews do not indicate that it increases retention or improves outcome (Dray & Wade, 2012; Knowles, Anokhina, & Serpell, 2013). Thus, future research is needed to identify and examine the different reasons for leaving treatment prematurely. Categorising attrition into separate groups, as per the present study, might help understand attrition further such that we can develop and evaluate strategies to decrease attrition. Issues related to self-criticism, shame and past abuse may be of interest to examine in terms of impact on attrition.

Further research is needed to address limitations of this study and to continue development of CBT-T as an effective therapy (Craig et al., 2008). First, the attrition rate in the present study is higher than most comparable studies, limiting conclusions. Second, a longer term follow-up period is required. Third, comparison with an independent control or treatment group is required. Fourth, clients with a BMI under 17.5 were excluded, and therefore findings cannot be generalised to this group. However, this case series does provide support for CBT-T as a potentially effective treatment for non-underweight eating disorder clients. It also supports the claim that novice therapists, such as trainee provisional psychologists, are able to deliver outcomes commensurate to experienced therapists when under expert supervision. While results have provided further support for the effectiveness of CBT-T, ongoing investigation of CBT-T as a component of stepped care in Australia is warranted.

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Table 1

Multinomial Logistic Regression Analyses to Assess Baseline Predictors of Attrition

Variable	Completers N = 13 M (SD)	Invited to Leave N = 3 M (SD)	Drop Out N = 10 M (SD)	OR (95% CI) Completer vs. Invited to Leave	OR (95% CI) Completer vs. Dropout
Age	30.40 (9.82)	29.48 (18.11)	26.32 (6.51)	0.99 (0.87 – 1.13)	0.95 (0.86 – 1.05)
Global EDE-Q	4.41 (0.74)	4.70 (0.86)	4.35 (0.86)	1.87 (0.27 – 13.03)	0.89 (0.27 – 2.94)
CIA	35.62 (7.67)	40.69 (2.15)	35.44 (7.55)	1.13 (0.91 – 1.42)	1.00 (0.88 – 1.13)
Objective binges/week	2.92 (3.72)	0.67 (0.58)	7.70 (8.87)	0.60 (0.21 – 1.71)	1.14 (0.96 – 1.35)
Purging/week	2.00 (3.51)	0 (0)	6.70 (9.39)	[a]	1.13 (0.96 – 1.32)
BMI	26.55 (7.14)	27.76 (5.65)	29.34 (9.81)	1.02 (0.87 – 1.21)	1.05 (0.94 – 1.17)
DASS Total	33 (13.48)	39.67 (5.51)	35.78 (10.05)	1.06 (0.93 – 1.22)	1.02 (0.95 – 1.11)
Confidence	73.46 (14.05)	73.33 (20.21)	74(13.92)	1.00 (0.91 – 1.09)	1.00 (0.94 – 1.07)
Suitability	82.69 (12.35)	76.67 (25.17)	75.43 (13.95)	0.97 (0.89 – 1.06)	0.96 (0.90 – 1.03)
ED Duration (years)	10.26 (9.15)	13.33 (14.57)	11.80 (6.00)	1.04 (0.90 – 1.21)	1.02 (0.93 – 1.13)

Note. EDE-Q = Eating Disorder Examination Questionnaire; CIA = Clinical Impairment Assessment; BMI = Body Mass Index; DASS = Depression Anxiety and Stress Scales; ED = Eating Disorder.
Objective bingeing and purging were also analysed using behavioural items from the EDE-Q (where behaviours are assessed over a 4 week period). The pattern of results was identical to the weekly frequency data.

Table 2

Eating Pathology over the Course of Treatment, using Completer and Intention-To-Treat Analyses

	Baseline (Assessment)		Pre-Treatment (session 1)			Mid-Treatment (Session 4)			Post-Treatment (Session 10)			1-Month Follow-Up			3-Month Follow-Up				
Completer (N = 13)	M	SE	M	SE	d	M	SE	d	M	SE	d	M	SE	d	M	SE	d	F	Post hoc comparisons
EDE-Q Global	4.41	0.29	4.19	0.29	0.22	3.24	0.29	1.16	2.03	0.29	2.37	2.02	0.29	2.38	1.81	0.29	2.59	18.85*	B, S1 > S4 > S10, F1, F3
Restraint	3.52	0.37	3.06	0.37	0.36	1.89	0.37	1.27	1.02	0.37	1.95	0.94	0.37	2.01	1.17	0.38	1.81	9.27*	B, S1 > S4, S10, F1, F3
Eating	4.31	0.28	3.82	0.28	0.51	2.71	0.28	1.65	1.54	0.28	2.89	1.48	0.28	2.92	0.91	0.29	3.44	19.39*	B, S1 > S4 > S10, F1, F3
Shape	5.33	0.38	5.15	0.38	0.14	4.36	0.38	0.74	3.19	0.38	1.63	3.20	0.38	1.62	2.75	0.39	1.93	9.25*	B, S1 > S10, F1, F3; S4 > S10, F1, F3
Weight	4.48	0.41	4.74	0.41	-0.18	4.00	0.41	0.34	2.37	0.41	1.49	2.48	0.41	1.41	2.42	0.42	1.43	8.32*	B, S1 > S10, F1, F3; S4 > S10, F1
CIA	35.62	2.77	31.71	2.77	0.41	23.80	2.77	1.23	14.83	2.77	2.17	15.66	2.77	2.08	13.53	2.82	2.30	11.53*	B, S1 > S4 > S10; B, S1 > F1, F3
Objective binges/week	2.92	0.61	2.08	0.61	0.40	0.15	0.61	1.31	0.00	0.61	1.38	0.12	0.61	1.33	0.23	0.64	1.24	3.89*	
Purging/week	2.00	0.49	0.77	0.49	0.72	0.23	0.49	1.04	0.08	0.49	1.13	0.14	0.49	1.10	0.23	0.51	1.02	2.28	
DASS	33.59	4.33	29.92	4.29	0.25	26.19	4.29	0.50	18.12	4.29	1.04	17.54	4.29	1.08	18.46	4.33	1.01	4.50*	B, S1, S4 > S10; B > F1
ITT (N = 26)																			
EDE-Q Global	4.42	0.19	3.96	0.20	0.47	3.11	0.22	1.27	1.94	0.24	2.29	1.95	0.25	2.22	1.76	0.26	2.34	23.84*	B, S1 > S4 > S10, F1, F3
Restraint	3.44	0.28	2.65	0.29	0.55	1.56	0.31	1.27	0.90	0.34	1.63	0.85	0.36	1.61	1.11	0.38	1.40	11.27*	B > S1 > S10, F1, F3; B, S1 > S4
Eating	4.21	0.20	3.58	0.21	0.61	2.61	0.23	1.48	1.38	0.26	2.44	1.37	0.27	2.39	0.84	0.29	2.71	25.54*	B, S1 > S4 > S10, F1, F3
Shape	5.31	0.24	4.91	0.25	0.33	4.35	0.27	0.75	3.17	0.30	1.58	3.19	0.32	1.50	2.75	0.33	1.77	12.11*	B > S4 > S10, F1, F3; S1 > S10, F1, F3
Weight	4.74	0.27	4.70	0.28	0.03	3.96	0.31	0.54	2.36	0.34	1.55	2.47	0.36	1.43	2.43	0.38	1.40	11.36*	B, S1, S4 > S10, F1, F3
CIA	36.16	1.86	31.46	1.92	0.50	23.50	2.08	1.28	14.55	2.28	2.08	15.46	2.42	1.92	13.39	2.55	2.04	18.00*	B, S1 > S4 > S10, F3; B, S1 > F1
Objective binges/week	4.50	0.82	2.73	0.82	0.43	0.51	0.93	0.91	0.20	1.09	0.89	0.23	1.13	0.87	0.29	1.18	0.83	3.59*	B > S4
Purging/week	3.58	0.94	1.96	0.94	0.34	0.85	0.99	0.57	0.60	1.10	0.58	0.58	1.16	0.57	0.60	1.23	0.54	3.00	
DASS	35.11	2.80	31.29	2.84	0.27	28.67	3.01	0.44	19.37	3.24	1.04	18.59	3.43	1.06	19.39	3.62	0.97	6.37*	B, S1, S4 > S10, F1; B > F3

Note. *Bonferroni adjusted comparisons for eating related variables $p < .01$; d = within-time effect size, Cohen's d from baseline; df varies from 34.55 – 57.10 for completers and 63.74 – 74.51 for ITT; ITT = Intention-to-treat; EDE-Q = Eating Disorder Examination Questionnaire; CIA = Clinical Impairment Assessment; DASS = Depression Anxiety and Stress Scales.

Table 3

End of Treatment Abstinence, Remission, and Good Outcome Rates

Sample		**Completer (N = 13)**	**Intent-to-treat (N = 26)**
Abstinence	Post-Treatment	76.9%	44%
	One-Month Follow-Up	61.5%	36%
	Three-Month Follow-Up	61.5%	36%
Remission	Post-Treatment	53.8%	28%
	One-Month Follow-Up	38.5%	20%
	Three-Month Follow-Up	46.2%	24%
Good Outcome	Post-Treatment	76.9%	52%
	One-Month Follow-Up	76.9%	52%
	Three-Month Follow-Up	84.6%	56%