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Self-compassion training for binge eating disorder: A pilot randomized controlled trial

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Objectives. The present pilot study sought to compare a compassion-focused therapy (CFT)-based self-help intervention for binge eating disorder (BED) to a behaviourally based intervention.

Design. Forty-one individuals with BED were randomly assigned to 3 weeks of food planning plus self-compassion exercises; food planning plus behavioural strategies; or a wait-list control condition.

Methods. Participants completed weekly measures of binge eating and self-compassion; pre- and post-intervention measures of eating disorder pathology and depressive symptoms; and a baseline measure assessing fear of self-compassion.

Results. Results showed that: (1) perceived credibility, expectancy, and compliance did not differ between the two interventions; (2) both interventions reduced weekly binge days more than the control condition; (3) the self-compassion intervention reduced global eating disorder pathology, eating concerns, and weight concerns more than the other conditions; (4) the self-compassion intervention increased self-compassion more than the other conditions; and (5) participants low in fear of self-compassion derived significantly more benefits from the self-compassion intervention than those high in fear of self-compassion.

Conclusions. Findings offer preliminary support for the usefulness of CFT-based interventions for BED sufferers. Results also suggest that for individuals to benefit from self-compassion training, assessing and lowering fear of self-compassion will be crucial.

Practitioner points

- Individuals with BED perceive self-compassion training self-help interventions, derived from CFT, to be as credible and as likely to help as behaviourally based interventions.
- The cultivation of self-compassion may be an effective approach for reducing binge eating, and eating, and weight concerns in individuals with BED.
- Teaching individuals with BED CFT-based self-help exercises may increase their self-compassion levels over a short period of time.
- It may be important for clinicians to assess and target clients' fear of self-compassion for clients to benefit from self-compassion training interventions.

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Gilbert (2005) developed compassion-focused therapy (CFT) to help self-critical, shame-prone individuals develop self-compassion. The CFT model views compassion as involving both sensitivity to the suffering of self and others, and a committed desire to alleviate and prevent this suffering (Gilbert, 2010; Gilbert, 2013). CFT grew out of the clinical observation that individuals high in shame and self-criticism struggle to generate affiliative, warm feelings towards the self (Gilbert, 2005). Its focus on increasing people's capacity for compassion is consistent with affective neuroscience research which suggests that care and affiliation evolved to be the primary regulators of our threat-processing system (Carter, 1998; Depue & Morrone-Strupinsky, 2005). Gilbert (2000, 2005) further observed that our evolved brains render it possible for us to take ourselves as object and relate to ourselves in the same way as others might relate to us, stimulating a similar range of neurophysiological responses. When we relate to ourselves in a hostile, critical manner, we feel threatened, ashamed, and/or angry, and are prone to submissive and self-protective responses (Gilbert, 2007; Gilbert, Clarke, Hempel, Miles, & Irons, 2004). When we relate to ourselves in a warm, compassionate manner, by contrast, we feel safe and soothed, and are more oriented towards trust (Longe *et al.*, 2010; Rockliff, Gilbert, McEwan, Lightman, & Glover, 2008).

Theory and interventions of CFT have garnered empirical support in depression (Gilbert & Procter, 2006), psychosis (Mayhew & Gilbert, 2008), social anxiety (Werner *et al.*, 2012), addiction (Kelly, Zuroff, Foa, & Gilbert, 2010), trauma (Lawrence & Lee, 2014), and more recently eating disorders (Gale, Gilbert, Read, & Goss, 2014). Self-compassion has been associated with less eating disorder pathology in college and clinical samples (Ferreira, Pinto-Gouveia, & Duarte, 2013; Wasylkiw, MacKinnon, & MacLellan, 2012). In addition, the extent to which eating disorder patients became more self-compassionate early in treatment predicted the rate at which their shame and symptoms decreased over 12 weeks (Kelly, Carter, & Borairi, 2014). By contrast, high fear of self-compassion – that is, strong worries about becoming more self-compassionate (Gilbert, McEwan, Matos, & Rivis, 2011) – has correlated positively with eating disorder pathology and has predicted poorer response to eating disorders treatment over 12 weeks (Kelly, Carter, Zuroff, & Borairi, 2013). The capacity for self-compassion may therefore help to facilitate eating disorder symptom remission.

Only two studies to our knowledge have examined self-compassion interventions for eating disorder pathology. Adams and Leary (2007) found that priming restrained eaters to think self-compassionately about their eating reduced the disinhibited eating that typically occurs after dieters break their rules. Gale *et al.* (2014) found that in outpatient eating disorders treatment program that integrated CFT with mainstream CBT yielded significant decreases in eating disorder symptoms. Together, findings suggest there may be value in cultivating self-compassion in eating disorder patients, perhaps through CFT-based approaches.

The present study

There have yet to be any randomized controlled trials of CFT-based interventions in eating disorder patients. The current pilot study aimed to fill this gap in the literature by comparing a brief CFT-based self-help intervention for binge eating disorder (BED) to a CBT behaviourally based self-help intervention. Individuals with BED have proved responsive to brief self-help treatments (Carter & Fairburn, 1998). Furthermore, brief CFT-based self-help interventions, practiced over 2–3 weeks, have produced clinically

significant changes in distress and health behaviour change in other populations (Kelly, Zuroff, & Shapira, 2009; Kelly *et al.*, 2010).

The objectives of the current study were to assess and compare a CFT-based self-compassion intervention, adapted from Goss and colleagues (Goss, 2011; Goss & Allan, 2011, 2014), to a behavioural intervention for BED adapted from Fairburn (1995). These were compared with regard to: (1) credibility and feasibility; (2) efficacy at improving (a) binge eating, (b) underlying eating disorder pathology such as concerns about weight, shape, and eating, and (c) psychosocial functioning – namely, self-compassion and depressive symptoms; and (3) the moderating effect of baseline fear of self-compassion on outcomes. Hypotheses were that: (1) both interventions would be perceived as equally credible and feasible; (2) the behavioural intervention would be more efficacious at reducing binge eating but the self-compassion intervention would be more efficacious at improving global eating disorder pathology and psychosocial functioning; and (3) the self-compassion intervention would be less efficacious the higher participants' baseline fear of self-compassion.

Method

Participants

Figure 1 summarizes the recruitment process. Prospective participants were recruited from advertisements in hospitals and eating disorder community centres, as well and through online advertisements in the community. Inclusion criteria were as follows: meeting DSM-5 criteria for BED; being over 18; and having regular access to the Internet, given the online questionnaires. Exclusion criteria were current treatment for BED (except a stable does of antidepressants); pregnancy; a serious uncontrolled medical illness known to affect eating; and a co-morbid substance-related disorder.

A diagnosis of BED was confirmed with the following steps. First, all prospective participants completed an online version of the eating disorder module of the Personal Health Questionnaire (PHQ; Spitzer, Kroenke, & Williams, 1999), which has been found to have high sensitivity and specificity for identifying cases of BED in community samples (Striegel-Moore *et al.*, 2010). Second, the researcher (a psychologist) telephoned those individuals who appeared eligible based on their PHQ responses, and asked a series of follow-up interview questions to ensure that: (1) self-reported binges involved both loss of control and the consumption of objectively large quantities of food in less than 2 hr; (2) binges occurred at least once/week for the last 3 months; (3) other features of binge eating were present (e.g., guilt after binges, eating more rapidly than normal); and (4) inappropriate compensation was absent. Finally, for all participants admitted into the study, their responses on the baseline Eating Disorder Examination Questionnaire (EDE-Q) were examined to confirm their consistency with a BED diagnosis.

Our final sample consisted of 41 individuals (34 females) with BED. The mean age was 45 years (SD = 15), and 75.6% of participants were Caucasian. The mean proportion of time participants had been struggling with binge eating prior to the study was 42.3% of their life (SD = 35%). Only one participant had received prior treatment for their binge eating.

Measures

Means and standard deviations for all study variables at baseline are presented in Table 1.

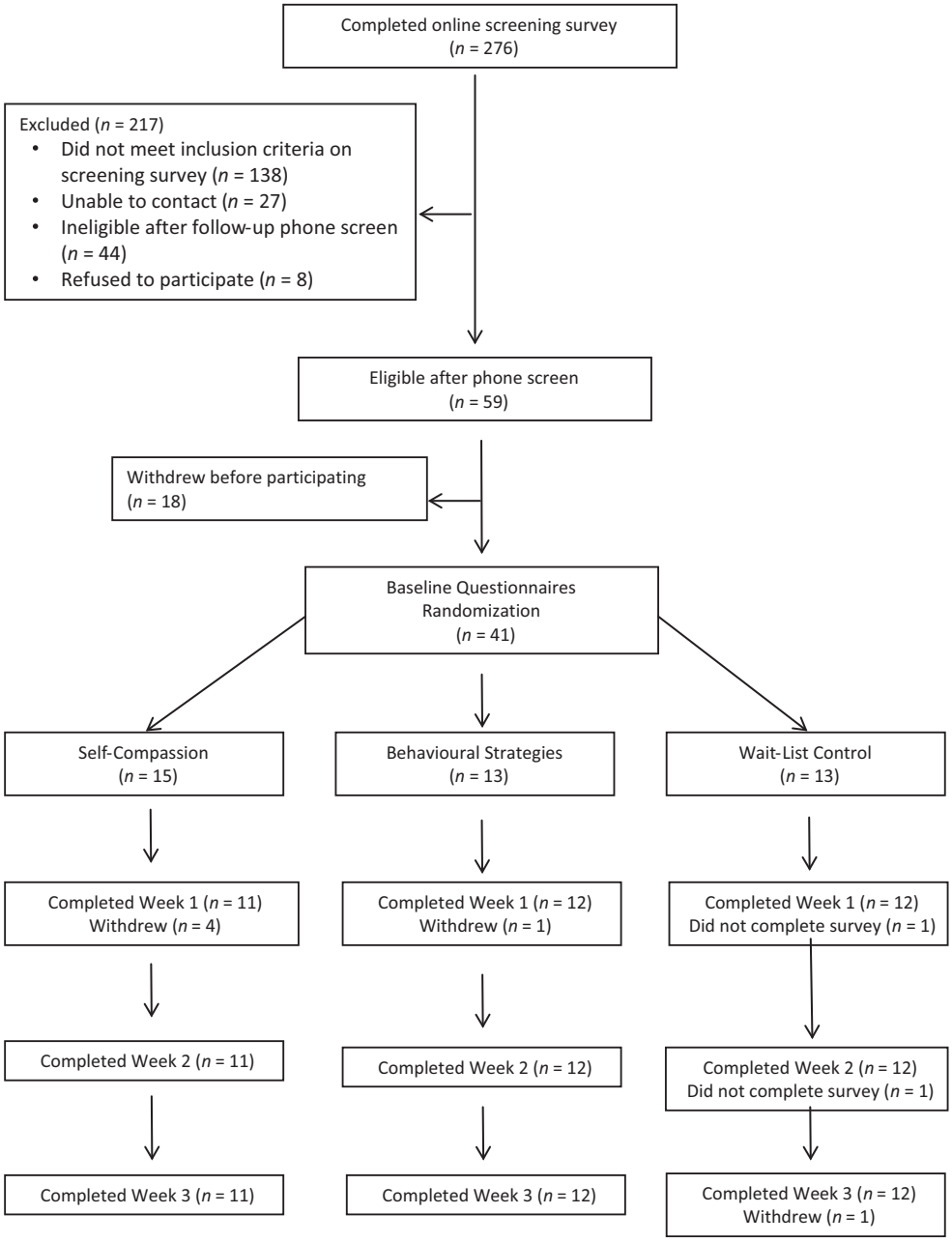

Figure 1. Recruitment and participation flow-chart.

Body mass index (kg/m^2)

The researcher weighed participants in their first and last session and obtained their height through self-report.

Table 1. Means, standard deviations, and zero-order correlations for study variables at baseline

	BMI	Binge episodes	Binge days	EDE-Q Global	CES-D	SC	Fear of SC	Mean (*SD*)
BMI	–	−.04	−.11	.04	.33*	−.28	.24	33.08 (7.09)
Binge episodes		–	.61***	.34*	.36*	−.32	.36*	5.57 (2.84)
Binge days			–	.23	.24	−.00	.13	4.26 (1.89)
EDE-Q Global				–	.44**	−.45**	.27	2.51 (0.95)
CES-D					–	−.57***	.62***	19.67 (13.56)
Self-compassion						–	−.55***	2.65 (.75)
Fear of self-compassion							–	2.32 (0.95)

Note. BMI = body mass index (kg/m^2); binge episodes = number of binge episodes the week prior to the study; binge days = the number of binge days in the week prior to the study; EDE-Q = Eating Disorder Examination Questionnaire; CES-D = Center for Epidemiological Studies Depression; SC = Self-Compassion.
*$p < .05$; **$p < .01$; ***$p < .001$.

Eating Disorder Examination Questionnaire (Fairburn & Beglin, 1994)
The EDE-Q is a 36-item measure that generates a global score of overall eating disorder pathology from 0 to 6, as well as four subscale scores reflecting dietary restraint, eating concerns (e.g., worries about losing control over eating), weight concerns, and shape concerns. This scale has strong test–retest reliability and internal consistency (Luce & Crowther, 1999). The Cronbach's alpha in our sample for the global score was .86.

Binge Eating Frequency
Participants were asked to report the frequency of objective binges the week prior to the study and to keep self-monitoring records of their objective binges each day of the study.

Self-Compassion Scale (Neff, 2003)
The Self-Compassion Scale (SCS) is a 26-item measure that assesses the tendency to be compassionate towards oneself at times of distress and disappointment. It yields six subscales scores and a total scale score, which was of primary interest in the present study. Sample items include: 'When I'm going through a very hard time, I give myself the caring and tenderness I need' and 'When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people'. The SCS has demonstrated strong reliability and validity, and the total scale score has strong internal consistency (Neff, 2003), with a Cronbach's alpha of .94 in our study. The SCS was administered weekly in this study.

Center for Epidemiological Studies for Depression (Radloff, 1977)
The Center for Epidemiological Studies for Depression (CES-D) is a 20-item measure of weekly depressive symptoms over the previous week. It has demonstrated high reliability and construct validity, and correlates with clinical assessment tools of depression (Ensel, 1986; Zich, Attkisson, & Greenfield, 1990). The CES-D was administered at the start and end of the 3-week study period. The Cronbach's alpha in our sample was .94. Mean baseline levels, reported in Table 1, indicate a mildly depressed sample.

Fears of Compassion Scale (Gilbert et al.*, 2011)*
The Fears of Compassion Scale (FCS) is a three-section measure that assesses fears related to giving and receiving compassion. In the present study, only the 15-item section assessing fear of self-compassion was administered. Sample items include 'I feel that I don't deserve to be kind and forgiving to myself', and 'I fear that if I develop compassion for myself, I will become someone I do not want to be'. This scale has demonstrated strong reliability and internal consistency, with a Cronbach's alpha in the present sample of .94.

Credibility/Expectancy Questionnaire (Devilly & Borkovec, 2000)
The Credibility/Expectancy Questionnaire (CEQ) is a 6-item measure comprising two subscales: Credibility, which assesses beliefs regarding the strength of the treatment; and Expectancy, which assesses the extent to which participants feel their symptoms will

drop during the intervention period. The CEQ has demonstrated a strong internal consistency and good test–retest reliability across clinical populations (Devilly & Borkovec, 2000). The CEQ was administered immediately after participants were introduced to their assigned intervention. Cronbach's alphas were .75 for Credibility and .95 for Expectancy.

Homework Rating Scale (Kazantzis, Deane, & Ronan, 2004)

The 12-item Homework Rating Scale (HRS) inquires about client/participant, task, and therapist/researcher characteristics that have been linked to compliance with homework assignments. Sample items include: 'How much of the assignment were you able to do?' and 'How well did you do the assignment?' After each study week, participants in the intervention conditions completed two versions of the HRS to report on their compliance with: (1) the food-planning assignment common to both interventions; and (2) their intervention-specific assignment (e.g., behavioural strategy vs. self-compassion). The HRS demonstrated adequate internal consistency, with a Cronbach's alpha of .82 in this sample.

Overview of procedure

The study received ethics approval from an academic hospital in a large urban setting. Participants attended two laboratory sessions with a researcher, 3 weeks apart from one another. In the first lab session, the study purpose and tasks were reviewed. After informed consent was obtained, all participants were asked to complete a battery of questionnaires. They were subsequently informed of the condition to which the random number generator had assigned them: self-compassion self-help, behavioural self-help, or wait-list control. Participants assigned to one of the two interventions remained in the laboratory to learn about their assigned self-help exercises, which they were then asked to practice for 3 weeks subsequently. Participants across all three conditions completed short online questionnaires from home after week 1 and 2, and returned to the laboratory for a final meeting 3 weeks later. During this session, participants completed post-questionnaires and the wait-list participants were given the opportunity to learn about one of the two self-help interventions.

Overview of self-help interventions

Participants assigned to the two self-help interventions learned about their assigned intervention through an audio-guided PowerPoint slideshow created by the research team. In both conditions, the slideshow presented the rationale for each treatment component, and then presented the intervention itself. Participants viewed the slideshow privately via a computer and headphones in the research laboratory. Both interventions consisted of two treatment components which were described as targeting two factors that maintain binge eating: (1) irregular and unbalanced eating; and (2) difficulties coping with urges to binge. The two intervention conditions were identical in the way they described and targeted irregular and unbalanced eating, but differed in their approach for managing difficulties coping with urges to binge. That is, the behavioural intervention emphasized behavioural strategies, whereas the self-compassion intervention emphasized the cultivation of self-compassion.

Treatment component 1 – Common to both interventions

This first component was adapted from 'Step 2 – Regular Eating' of Fairburn's (1995) *Overcoming Binge Eating*, CBT-based self-help book that has proved helpful in reducing binge eating among BED sufferers (Carter & Fairburn, 1998). The slideshow explained the ways in which eating irregularly throughout the day – for example, not eating until the afternoon – can perpetuate binge eating, and the ways in which trying to avoid certain types of food (e.g., 'junk food') can actually increase the chances of bingeing on them later. Participants were taught about the importance of engaging in regular (i.e., three meals, three snacks), balanced (i.e., a mix of food groups), and planned eating, and were encouraged to develop and follow a structured eating plan to facilitate regular eating throughout the day. Participants were given planning sheets to complete every evening, and were given principles to follow to help lower their chances of binge eating. They were asked to follow their plan as closely as possible the following day, and to use this form to report on urges to binge, any deviations to their plan, and any binges.

Treatment component 2 – Behavioural strategies intervention condition

The second component of the behavioural strategies intervention involved developing alternate activities with which to replace binge eating when urges arise. This component was derived from 'Step 3 – Alternatives to Binge Eating' from Fairburn's (1995) book. In the first laboratory session, participants were asked to generate a list of activities they believe might help them avoid giving into urges to binge eat. The slideshow provided guidance as to how to create this list, and what types of activities might be suitable. The slideshow instructed them to keep the list in a place where it would be accessible at all times.

At every urge to binge over the 3 weeks, participants were asked to: (1) pay attention to their urge; (2) pull out their list of alternate activities; (3) work through the list and choose the activity they liked most; (4) ensure they do something that will allow time to pass, and that is active; (5) plan more than one activity if they feel this would be helpful; and (6) record the strategy/strategies they used on their urge-monitoring form. Participants were asked to follow this same set of guidelines whenever they felt the urge to deviate from their food plan over the 3 weeks. Every evening, they were asked to review their updated planning form. Via an online link, they were asked to write about what they learned from the day's eating, urges, and strategies, and what they would like to do similarly versus differently tomorrow.

Treatment component 2 – Self-compassion intervention condition

The second component of the self-compassion intervention educated participants on the role that self-compassion may play in helping people manage urges to binge eat, and adapted components of Goss' (2011) self-help guide for overeating. It discussed how common it is for people to be self-critical when undergoing a struggle, but highlighted that self-blame usually increases anxiety and undermines motivation to make positive changes. Self-compassion, by contrast, tends to make people feel more cared about, better able to tolerate distress, and more motivated to make healthful decisions. The slideshow guided participants through two self-compassion imagery exercises that involved recalling a time someone was compassionate towards them, and a time when they felt compassion towards someone else. Participants were asked to pay attention to the feelings these exercises elicited and were subsequently invited to write themselves a self-compassionate

letter focused on expressing kindness, empathy, and sensitivity for binge eating struggles. A sample letter was provided to help facilitate the experience.

During the 3-week intervention, participants were encouraged to cultivate a self-compassionate mindset through imagery, self-talk, and letter-writing. A self-compassionate mindset was described as: (i) encouraging yourself with care, strength, wisdom, and warmth to engage in the behaviours that will help you refrain from binge eating; (2) understanding and empathizing with your struggle to make changes, and (3) forgiving yourself if you do binge. Whenever participants encountered urges to binge over the 3 weeks, binged despite their best efforts, or felt tempted to deviate from their eating plan, instructions were to: (1) visualize your compassionate image and feel its compassion and care guiding you; (2) talk to yourself from this warm, compassionate mindset; (3) accept and care for your distress; and (4) commit to the most self-compassionate course of action. Participants were told they could either imagine a compassionate self, or a compassionate other, depending on which they found more helpful.

Every evening before bed, participants were asked to follow a link to an online form where they would engage in compassionate imagery visualization, and write themselves a letter in which they self-compassionately reflect on their day and encourage themselves for tomorrow. The two types of imagery exercises – compassionate other and compassionate self – were given to participants on alternate days to provide variety.

Results

Our intent-to-treat data analytic approach made it possible to retain data from participants who dropped out early or failed to provide data at all four time points. Of the 41 individuals who consented to participate in our study, six dropped out (see Figure 1). Four dropped out of the self-compassion condition during week 1; reasons were: (1) a death in the family; (2) not having a computer at home; (3) finding the letter-writing exercises too difficult; and (4) unspecified. One dropped out of the behavioural condition during week 1, claiming to find the intervention too difficult. Finally, one participant dropped out of the control condition during week 3 because her father was moved to palliative care. When examining the distribution of mean weekly binge episodes across participants at the start of the study, two participants, one from each of the two intervention conditions, were clear outliers, reporting 35 and 70 weekly binge episodes respectively. These numbers reflected 10.4 and 22.7 standard deviations from the mean of the trimmed sample leading us to remove these two participants from final analyses.

Analytic strategy

All analyses were conducted in SAS 9.2 (SAS Institute, 2008) using multilevel modelling with maximum likelihood estimation. Multilevel modelling is the recommended statistical approach when one's data is dependent in nature (i.e., multiple observations from the same participant). It has the advantage of being able to retain data from participants for whom some observations may be missing, provided these observations are missing at random (Little, 1995; Singer & Willett, 2003), which was the case in our data set. Participants who dropped out of the study did not differ in baseline demographic, symptom, or psychosocial variables from those who did not. ANOVAs revealed no baseline differences between the three conditions in terms of age, sex, education,

ethnicity, illness duration, binge frequency, body mass index (BMI), EDE-Q pathology, depressive symptoms, or fear of self-compassion. Participants assigned to the self-compassion condition, however, had lower baseline levels of self-compassion than those assigned to the behavioural strategies condition, $F(1, 38) = 7.08$, $p < .05$. Baseline self-compassion and its interaction with time were therefore controlled in all primary analyses.

Statistical models

All models included a fixed and random effects portion representing effects thought to be constant and variable across participants. We initially included a random intercept for participants and an unstructured error covariance structure. When dependent variables had more than two data points, a random effect for time was also included. Fixed effects in all primary models were condition, time, and Condition × Time. Control variables included participants' baseline score on the relevant-dependent variable and its interaction with time, and self-compassion and Self-compassion × Time. Baseline BMI and its interaction with time and sex as well as its interaction with time were initially included as fixed effects in all initial models but were not significant so were removed from final models. For each outcome variable, all available time points for that variable served as the dependent variable. A significant Condition × Time interaction would indicate that the dependent variable changed over time as a function of the condition to which participants were randomly assigned. For central outcome variables, baseline, Fear of self-compassion × Condition × Time, and its constituent two-way interactions, were added as predictors to determine whether fear of self-compassion moderated the effects of condition over time.

All significant Condition × Time interactions were probed by computing and comparing slope estimates, representing rates of change in the dependent variable, within each condition (see Table 2). In addition, mean point estimates at each time point were calculated for each condition (see Table 3). In the case of significant Fear of self-compassion × Condition × Time interactions, simple slopes were estimated and plotted within each condition for participants with higher (1 *SD* above the mean) and

Table 2. Slope estimates and contrasts for Significant condition × Time effects in multilevel models

	Slope (rates of change) estimates *B* (*SE*)			
Dependent variable	Self-compassion	Behavioural	Control	Significant contrasts
Binge days	−.80 (.17)***	−.68 (.16)***	−.03 (.17)	SC & Beh > Control**
EDE-Q Global	−.17 (.04)***	−.05 (.04)	.03 (.04)	SC > Beh and Control*
EDE-Q Weight Concerns	−.17 (.04)***	−.02 (.04)	.03 (.04)	SC > Beh and Control**
EDE-Q Eating Concerns	−.24 (.06)***	−.08 (.06)	−.01 (.07)	SC > Beh and Control*
SCS total	.28 (.06)***	.17 (.06)*	.01 (.06)	SC > Control*
SCS positive subscales	.17 (.07)*	.05 (.07)	−.12 (.07)	SC > Beh and Control*
SCS negative subscales	−.09 (.09)	−.03 (.08)	.30 (.08)***	SC and Beh < Control**

Note. EDE-Q = Eating Disorder Examination Questionnaire; SCS = Self-Compassion Scale; SC = self-compassion intervention condition; Beh = behavioural intervention condition; Control = wait-list control condition.
*$p < .05$; **$p < .01$; ***$p < .001$.

Table 3. Mean point estimates and standard errors per condition at each assessment point as calculated from multilevel models

	Estimated means and standard errors at each time point		
Dependent variable	Self-compassion	Behavioural	Control
Weekly binge episodes			
Baseline	5.7 (.22)	5.7 (.22)	5.7 (.22)
Week 1	4.65 (.32)	4.43 (.31)	5.0 (.30)
Week 2	3.61 (.57)	3.17 (.53)	4.72 (.53)
Week 3	2.57 (.84)	1.9 (.76)	4.23 (.78)
Weekly binge days			
Baseline	3.95 (.16)	3.95 (.16)	3.95 (.16)
Week 1	3.15 (.21)	3.27 (.2)	3.93 (.20)
Week 2	2.35 (.35)	2.6 (.33)	3.9 (.34)
Week 3	1.54 (.51)	1.92 (.48)	3.88 (.49)
Eating Disorder Examination Questionnaire – Global			
Baseline	2.6 (.04)	2.6 (.04)	2.6 (.04)
Week 1	2.43 (.04)	2.55 (.04)	2.57 (.04)
Week 2	2.25 (.07)	2.50 (.07)	2.54 (.08)
Week 3	2.08 (.11)	2.45 (.11)	2.51 (.12)
Body mass index			
Baseline	33 (1.05)	33 (1.05)	33 (1.05)
Week 1	32.89 (1.05)	33.02 (1.05)	33 (1.05)
Week 2	32.78 (1.07)	33.05 (1.07)	33 (1.07)
Week 3	32.67 (1.12)	33.08 (1.11)	33 (1.12)
Self-Compassion Scale – Total			
Baseline	2.76 (.04)	2.76 (.04)	2.76 (.04)
Week 1	3.03 (.07)	2.93 (.07)	2.77 (.07)
Week 2	3.31 (.13)	3.11 (.12)	2.78 (.12)
Week 3	3.58 (.18)	3.28 (.18)	2.79 (.18)
Depressive symptoms			
Baseline	20.18 (.63)	20.18 (.63)	20.18 (.63)
Week 1	19 (.69)	19.91 (.67)	21.09 (.66)
Week 2	17.82 (1.19)	19.63 (1.16)	22.01 (1.18)
Week 3	16.64 (1.8)	19.35 (1.75)	22.92 (1.8)

lower (1 *SD* below the mean) levels of baseline fear of self-compassion (see Figures 2 and 3). For all significant effects, effect size correlations were computed using Rosnow and Rosenthal's (1996) formula of $r = [F/(F + df)]^{1/2}$. According to Cohen (1988), $r = .10$ with a small effect and $r = .30$ a medium effect.

Descriptive analyses

Table 1 presents means and standard deviations of all variables at baseline, as well as the Pearson zero-order correlations between these variables. Mean weekly binge episodes and binge days correlated strongly with one another, and the former correlated positively with EDE-Q pathology, depressive symptoms, and fear of self-compassion. BMI was unrelated to all study variables except depressive symptoms, with which it correlated positively. Fear of self-compassion, low self-compassion, and depressive symptoms were

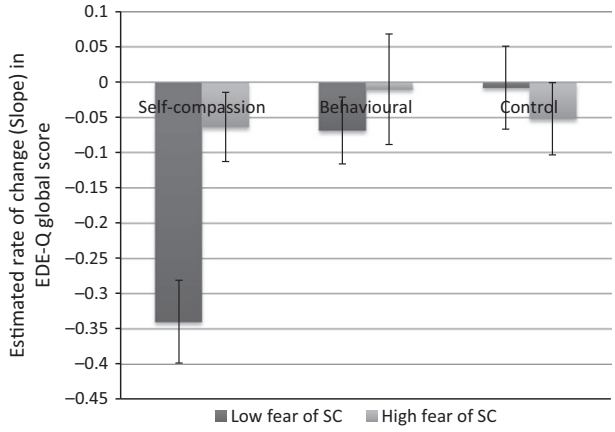

Figure 2. Fear of self-compassion × Condition × Time effect ($p < .01$) predicting Eating Disorder Examination Questionnaire (EDE-Q) global scores. Slope estimates representing rates of change in EDE-Q global scores are plotted on the *y*-axis for individuals 1 *SD* below (low) and 1 *SD* above (high) the mean in baseline fear of self-compassion. Participants low in fear of self-compassion in the self-compassion intervention had the greatest decreases in EDE-Q scores.

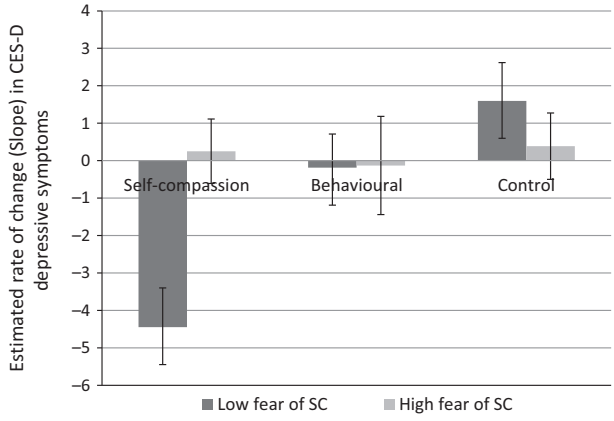

Figure 3. Fear of self-compassion × Condition × Time effect, with estimated slopes (rates of change) on the *y*-axis. Participants low (−1 *SD*) in baseline fear of self-compassion in the self-compassion condition had greater decreases in depressive symptoms than those high (+1 *SD*) in fear of self-compassion.

all moderately correlated with one another, and the latter two variables were associated with higher EDE-Q Global scores.

Credibility, expectancy, and compliance across conditions

Credibility and expectancy

Mean ratings of intervention credibility and binge reduction expectancy did not differ by condition, $t(27) = .48$, *n.s.* and $t(27) = -.35$, *n.s.* They were 7.20/10 ($SD = 1.28$) and 69.09% ($SD = 19.67$) in the self-compassion intervention and 6.97/10 ($SD = 1.21$) and 71.77% ($SD = 20.38$) in the behavioural strategies intervention.

Subjective compliance

Mean self-reported compliance ratings were high across the self-compassion and behavioural interventions. With regard to compliance with the food-planning component, means across the three study weeks were 3.31 (SD = 0.15) and 3.32 (SD = 0.16) respectively, and these did not differ from one another, $t(19) = -.42$, *n.s.* There was also no effect for time, $F(1, 38) = 0.35$, *n.s.*, or Condition × Time, $F(1, 37) = .26$, *n.s.* Mean compliance ratings with the urge-based self-help exercises were 3.07 (SD = 0.18) in the self-compassion intervention and 3.17 (SD = 0.19) in the behavioural intervention, and these once again did not differ from one another, $t(19) = .18$, *n.s.*, There was, however, a significant effect for time, $F(1, 39) = 7.06$, $p = .01$, but not Condition × Time, indicating that participants across the two intervention conditions reported becoming more compliant with their intervention-specific exercise over the 3 weeks.

Objective compliance with nightly homework

Nightly written homework was monitored via Qualtrics.com and compliance was scored according to how many written forms participants completed. Means were 12.43 (SD = 5.24) in the self-compassion condition and 10.86 (SD = 6.27) in the behavioural condition. There were no between-group differences, $t(26) = .72$, *n.s.*

Binge eating

Condition × Time did not predict changes in mean weekly binge episodes, $F(2, 85) = 2.36$, $p = .10$, but did predict decreases in mean weekly binge days, $F(2, 86) = 5.83$, $p < .01$, effect size $r = .25$. Slope estimates within each condition are presented in Table 2, and reveal that binge days decreased significantly in the two intervention conditions. Contrasts additionally revealed that on average these two conditions reduced weekly mean binge days more than the control condition, $F(1, 82) = 11.64$, $p < .01$, effect size $r = .35$. See Table 3 for mean point estimates across time points. Fear of self-compassion × Condition × Time did not predict mean weekly binge episodes, $F(2, 80) = 0.21$, *n.s.*, or binge days, $F(2, 81) = 0.24$, *n.s.*

EDE-Q eating disorder symptoms

There was a significant effect for Condition × Time in predicting EDE-Q Global, $F(2, 102) = 3.34$, $p < .05$, effect size $r = .18$; Eating Concern, $F(2, 102) = 3.19$, $p < .05$, effect size $r = .17$; and Weight Concern, $F(2, 102) = 5.96$, $p < .01$, effect size $r = .23$. Condition × Time did not predict Restraint or Shape Concern. As reported in Table 2, rates of change in EDE-Q Global, Eating Concern, and Weight Concern were significant in the self-compassion condition only. Contrasts further revealed that the self-compassion condition led to greater improvements than the average of the two other conditions, $F(1, 102) = 6.60$, $p < .01$, effect size $r = .25$; $F(1, 102) = 5.93$, $p < .05$, effect size $r = .23$; and $F(1, 102) = 11.22$, $p < .01$, effect size $r = .31$.

A significant effect emerged for Fear of self-compassion × Condition × Time predicting EDE-Q Global, $F(2, 97) = 4.67$, $p < .01$, effect size $r = .21$. Slope estimates for high and low fear of self-compassion within each condition revealed that only those participants in the self-compassion condition who were lower in fear of self-compassion had significant decreases in EDE-Q Global, $B = -.35$ (SE = 0.06), $p < .001$ (see Figure 2). EDE-Q Global scores did not decrease significantly for those higher in fear of

self-compassion in the self-compassion condition, $B = -.06$ ($SE = 0.05$), *n.s.*, and this slope estimate differed significantly from those lower in fear of self-compassion, $F(1, 97) = 13.08$, $p < .001$, effect size $r = .34$. In the behavioural and control conditions, changes in EDE-Q Global scores were not significant among those low in fear of self-compassion, $B = -.07$ ($SE = 0.05$), *n.s.* and $B = -.01$ ($SE = 0.06$), *n.s.*, or high in fear of self-compassion, $B = -.01$ ($SE = 0.08$), *n.s.* and $B = -.05$ ($SE = 0.05$), *n.s.*

Fear of self-compassion × Condition × Time was also a significant predictor of EDE-Q Eating Concern, Shape Concern, and Weight Concern, effect size *r*'s = .20–.27. Furthermore, the pattern of the interaction was the same as that for EDE-Q Global.

BMI

There was no effect of Condition × Time on BMI, $F(2, 97) = 0.23$, *n.s.*

Self-compassion

Condition × Time predicted self-compassion, $F(2, 90) = 5.08$, $p < .01$. As reported in Table 2, the estimated rate of self-compassion improvement in the self-compassion condition was greater than the average estimated rate across the behavioural and control conditions, $F(1, 90) = 5.93$, $p < .05$, effect size $r = .25$. To determine which aspects of self-compassion were responsible for this effect, the six SCS subscales were examined as separate dependent variables. Similarities emerged for the positively valenced (self-kindness, common humanity, mindfulness) and negatively valenced subscales (self-judgment, isolation, over-identification) and so these were respectively combined and examined as two dependent variables.

Condition × Time predicted the positive SCS subscales, $F(2, 90) = 4.13$, $p < .05$, effect size $r = .21$, and negative SCS subscales, $F(2, 90) = 6.28$, $p < .01$, and effect size $r = .26$. As evidenced by slope estimates presented in Table 2, positive self-compassion improved in the self-compassion condition only, and contrasts revealed that this improvement was greater than that of the other two conditions, $F(1, 90) = 4.98$, $p < .05$, effect size $r = .23$. Significant changes in negative self-compassion occurred in the control condition only, where there were increases over time (see Table 2). Contrasts indicated that these changes differed significantly from the average changes in the other two conditions, $F(1, 90) = 12.49$, $p < .001$, effect size $r = .35$. Fear of self-compassion × Condition × Time did not predict total self-compassion, $F(1, 85) = 0.87$, *n.s.*, or the positive and negative SCS subscales.

Depressive symptoms

Condition × Time did not predict changes in depressive symptoms, $F(2, 94) = 2.45$, $p = .09$, but Fear of self-compassion × Condition × Time did, $F(2, 88) = 5.51$, $p < .01$, and effect size $r = .24$. Slope estimates, plotted in Figure 3, revealed that participants in the self-compassion condition who were lower in fear of self-compassion were the only participants to experience significant decreases in depressive symptoms over time, $B = -4.5$ ($SE = 1.05$), $p < .001$. Depressive symptoms did not decrease significantly for those higher in fear of self-compassion in the self-compassion condition, $B = .25$ ($SE = 0.86$), *n.s.*, and these former two rates of change differed significantly from one another, $F(1, 88) = 13.32$, $p < .001$, effect size $r = .36$. In the behavioural and control conditions, changes in depressive symptoms were not significant among those low in fear

of self-compassion, $B = -.19$ ($SE = 0.90$), *n.s.*, and $B = 1.6$ ($SE = 1.02$), *n.s.,* or high in fear of self-compassion, $B = -.13$ ($SE = 1.31$), *n.s.* and $B = .39$ ($SE = 0.89$), *n.s.*

Discussion

This pilot study was the first randomized controlled trial to our knowledge of a CFT-based self-compassion intervention in a clinical population. Results provide preliminary evidence that CFT-based interventions may be a useful adjunct to existing evidence-based treatments for BED. First, credibility and compliance ratings revealed that the self-compassion and behavioural strategies self-help interventions demonstrated equal feasibility over a 3-week time period. Second, both interventions reduced mean weekly binge days more than the control condition. Third, the self-compassion intervention reduced global eating disorder pathology, weight concerns, and eating concerns more than the behavioural strategies and control conditions. Fourth, the self-compassion intervention produced greater improvements in self-compassion than the control condition. Finally, participants in the self-compassion condition who had relatively low baseline fear of self-compassion had the greatest improvements in eating disorder pathology and depressive symptoms.

Participants in both self-help interventions more than halved their binge frequency, dropping from roughly 4 days/week of binge eating to under 2 days/week (see Table 3). This proportion of binge reduction is similar to what Carter and Fairburn (1998) observed over 12 weeks in their pure CBT self-help treatment for BED. An additional finding was that the self-compassion intervention was superior at reducing cognitive-affective components of the eating disorder, namely global eating disorder pathology, weight concerns, and eating concerns. Based on the identified clinical cutoff of 2.3 out of 6 on the EDE-Q (Mond, Hay, Rodgers, Owen, & Beumont, 2004), the average participant in the self-compassion condition would no longer have been identified as having an eating disorder by week 3, whereas the average participant in both other conditions would have (see Table 3). The self-compassion intervention was also superior at increasing self-compassion, supporting our experimental manipulation (see Table 2). Together, these preliminary results suggest that the combination of food planning and monitoring with either behavioural strategies or self-compassion exercises can yield improvements in binge eating among BED sufferers. However, self-compassion training may be more effective at reducing underlying psychological vulnerability and improving resilience.

In this study, self-compassion was assessed using the SCS (Neff, 2003), which is based on a conceptual definition of self-compassion that differs from CFT's. To gain a better understanding of which forms of self-relating our CFT intervention influenced, we examined the positive and negative subscales of the SCS separately as these could arguably be seen as proxy indicators of relating to oneself with care and compassion, and with criticism and hostility. These follow-up analyses revealed that the self-compassion intervention increased scores on the positive subscales – namely, relating to oneself with kindness in difficult times, viewing personal suffering as a human inevitability, and taking a mindful stance towards one's distress or shortcomings. Participants' amalgamated scores on these three subscales increased significantly in the self-compassion condition, and this increase was greater than what occurred in the control condition. Interestingly, amalgamated scores on the SCS's three negative subscales, representing the tendency to be self-judgmental, view one's suffering as isolating, and over-identify with one's inadequacies, did not decrease. Rather, these negative features increased over

the 3 weeks in the wait-list control condition, and this increase differed significantly from what occurred in the self-compassion and behavioural conditions. It therefore appears as though the self-compassion exercises in the present study did not alleviate self-critical, ruminative processes but did enhance the tendency to be kind and caring towards oneself.

Fear of self-compassion as a moderator of intervention effects

In the self-compassion condition, participants who were more fearful of self-compassion at baseline had fewer improvements in eating disorder pathology and depressive symptoms, compared with those who were lower in fear of self-compassion. An examination of Figures 2 and 3 reveals that this brief self-compassion intervention was highly beneficial to BED sufferers who entered the study with little fear or resistance to the notion of cultivating self-compassion. In addition, it appears that higher fear of self-compassion undermined the benefits of treatment, a finding that builds on work by Kelly *et al.* (2013). Perhaps participants' level of worry about the negative outcomes to which self-compassion might lead (e.g., weakness, a lowering of standards) may have influenced the extent to which they engaged in the self-compassion intervention exercises. The relative absence of reliably warm and supportive caregiving early in life is thought to be a contributor to fears of compassion from others and self (Gilbert, 2005; Gilbert *et al.*, 2011). It could therefore be that among individuals with a high fear of self-compassion, the self-compassion exercises were experienced as highly foreign, and may have triggered avoidant or overwhelmed emotional reactions. Future research should investigate the mechanisms by which fear of self-compassion may undermine the benefits of self-compassion training. In addition, studies might focus on examining interventions that can reduce the fear of self-compassion in clinical populations. There is promising evidence in community adults that compassion cultivation training programmes may be effective in this regard (Jazaieri *et al.*, 2013).

Limitations and future research

This study suffered a number of limitations. First, it was a pilot study, with a relatively small sample size and short intervention period. A second and related limitation is that the absence of follow-up assessments makes it impossible to know whether participants sustained the gains they achieved in a 3-week study period. A future longitudinal study with a larger sample size is recommended. Third, this sample was predominantly female and Caucasian meaning we must be cautious about generalizing results beyond these groups. A fourth limitation of the study is the reliance on self-report measures. Fifth, our two interventions had a treatment component focused on food planning and monitoring. A future study would benefit from including a fourth condition consisting of food planning and monitoring only to isolate the effects of this activity.

It should be noted that although there is value to randomized controlled trials, in which interventions are compared to one another, combining the most useful parts of both self-compassion and behavioural interventions may be the optimal treatment approach. Qualitative interviews with participants may be one way in which to guide decisions about which intervention component(s) were least and most helpful. It would also be useful to compare the efficacy of the current self-compassion intervention to one that is therapist-guided. Indeed, one participant in the condition withdrew prematurely due to finding the letter-writing too hard. It would be interesting to know whether the presence

of a supportive and facilitating therapist would have changed her, and others', treatment course.

Conclusions

Results provide preliminary evidence that in combination with food planning and self-monitoring, self-help exercises that focus on the cultivation of self-compassion may be an effective treatment approach for BED. For BED sufferers to obtain the greatest benefits from self-compassion training, results suggest it will be important to assess and lower fears of becoming more self-compassionate.

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References

Adams, C. E., & Leary, M. R. (2007). Promoting self-compassionate attitudes toward eating among restrictive and guilty eaters. *Journal of Social and Clinical Psychology*, *26*, 1120–1144. doi:10.1521/jscp.2007.26.10.1120

Carter, C. S. (1998). Neuroendocrine perspectives on social attachment and love. *Psychoneuroendocrinology*, *23*, 779–818. doi:10.1016/S0306-4530(98)00055-9

Carter, J. C., & Fairburn, C. G. (1998). Cognitive–behavioral self-help for binge eating disorder: A controlled effectiveness study. *Journal of Consulting and Clinical Psychology*, *66*, 616–623. doi:10.1037/0022-006X.66.4.616

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Depue, R. A., & Morrone-Strupinsky, J. V. (2005). A neurobehavioral model of affiliative bonding: Implications for conceptualizing a human trait of affiliation. *Behavioral Brain Science*, *28*, 313–350. doi:10.1017/S0140525X05330068

Devilly, G. J., & Borkovec, T. D. (2000). Psychometric properties of the credibility/expectancy questionnaire. *Journal of Behavior Therapy and Experimental Psychiatry*, *31*, 73–86. doi:10.1016/S0005-7916(00)00012-4

Ensel, W. M. (1986). Measuring depression: The CES-D Scale. In N. Lin, A. Dean, & W. M. Ensel (Eds.), *Social support, life events, and depression* (pp. 51–70). New York, NY: Academic Press.

Fairburn, C. G. (1995). *Overcoming binge eating*. New York, NY: Guilford Press.

Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorders: Interview or self-report questionnaire? *International Journal of Eating Disorders*, *16*, 363–370.

Ferreira, C., Pinto-Gouveia, J., & Duarte, C. (2013). Self-compassion in the face of shame and body image dissatisfaction: Implications for eating disorders. *Eating Behaviors*, *14*, 207–210. doi:10.1016/j.eatbeh.2013.01.005

Gale, C., Gilbert, P., Read, N., & Goss, K. (2014). An evaluation of the impact of introducing compassion focused therapy to a standard treatment programme for people with eating disorders. *Clinical Psychology & Psychotherapy*, *21*, 1–12. doi:10.1002/cpp.1806

Gilbert, P. (2000). Social mentalities: Internal 'social' conflicts and the role of inner warmth and compassion in cognitive therapy. In P. Gilbert & K. G. Bailey (Eds.), *Genes on the couch: Explorations in evolutionary psychotherapy* (pp. 118–150). Hove, UK: Brenner-Routledge.

Gilbert, P. (Ed.) (2005). *Compassion: Conceptualisations, research, and use in psychotherapy*. London, UK: Routledge.

Gilbert, P. (2007). *Psychotherapy and counselling for depression* (3rd ed.). London, UK: Sage.

Gilbert, P. (2010). An introduction to compassion focused therapy in cognitive behavior therapy. *International Journal of Cognitive Therapy*, *3*, 97–112.

Gilbert, P. (2013). *Using the power of mindfulness and compassion to transform our lives*. London, UK: Constable & Robinson.

Gilbert, P., Clarke, M., Hempel, S., Miles, J. N. V., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms, styles and reasons in female students. *British Journal of Psychology*, *43*, 31–50. doi:10.1348/014466504772812959

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice*, *84*, 239–255. doi:10.1348/147608310X526511

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, *13*, 353–379. doi:10.1002/cpp.507

Goss, K. (2011). *The compassionate-mind guide to ending overeating: Using compassion-focused therapy to overcome bingeing and disordered eating*. Oakland, CA: New Harbinger.

Goss, K., & Allan, S. (2011). An introduction compassion focused therapy for eating disorders. In J. Fox & K. Goss (Eds.), *Eating and its disorders* (pp. 303–314). Chichester, UK: Wiley-Blackwell.

Goss, K., & Allan, S. (2014). The development and application of compassion-focused therapy for eating disorders (CFT-E). *British Journal of Clinical Psychology*, *53*, 62–77. doi:10.1111/bjc.12039

Jazaieri, H., Jinpa, G. T., McGonigal, K., Rosenberg, E. L., Finkelstein, J., Simon-Thomas, E., … Goldin, P. R. (2013). Enhancing compassion: A randomized controlled trial of a compassion cultivation training program. *Journal of Happiness Studies*, *14*, 1113–1126. doi:10.1007/s10902-012-9373-z

Kazantzis, N., Deane, F. P., & Ronan, K. R. (2004). Assessing compliance with homework assignments: Review and recommendations for clinical practice. *Journal of Clinical Psychology*, *60*, 627–641. doi:10.1002/jclp.10239

Kelly, A. C., Carter, J. C., & Borairi, S. (2014). Are improvements in shame and self-compassion early in eating disorders treatment associated with better patient outcomes? *International Journal of Eating Disorders*, *47*, 54–64. doi:10.1002/eat.22196

Kelly, A. C., Carter, J. C., Zuroff, D. C., & Borairi, S. (2013). Self-compassion and fear of self-compassion interact to predict response to eating disorders treatment: A preliminary investigation. *Psychotherapy Research*, *23*, 252–264. doi:10.1080/10503307.2012.717310

Kelly, A. C., Zuroff, D. C., Foa, C. L., & Gilbert, P. (2010). Who benefits from training in self-compassionate self-regulation? A study of smoking reduction. *Journal of Social and Clinical Psychology*, *29*, 727–755. doi:10.1521/jscp.2010.29.7.727

Kelly, A. C., Zuroff, D. C., & Shapira, L. B. (2009). Soothing oneself and resisting self-attacks: The treatment of two intrapersonal deficits in depression vulnerability. *Cognitive Therapy and Research*, *33*, 301–313. doi:10.1007/s10608-008-9202-1

Lawrence, V. A., & Lee, D. (2014). An exploration of people's experiences of compassion-focused therapy for trauma, using interpretative phenomenological analysis. *Clinical Psychology & Psychotherapy*, *21*, 495–507. doi:10.1002/cpp.1854

Little, R. J. A. (1995). Modeling the drop-out mechanism in repeated-measures studies. *Journal of the American Statistical Association*, *90*, 1112–1121. doi:10.1080/01621459.1995.10476615

Longe, O., Maratos, F. A., Gilbert, P., Evans, G., Volker, F., Rockliff, H., & Rippon, G. (2010). Having a word with yourself: Neural correlates of self-criticism and self-reassurance. *Neuroimage*, *49*, 1849–1856. doi:10.1016/j.neuroimage.2009.09.019

Luce, K. H., & Crowther, J. H. (1999). The reliability of the Eating Disorder Examination-Self-Report Questionnaire version (EDE-Q). *International Journal of Eating Disorders*, *25*, 349–351. doi:10.1002/(SICI)1098-108X(199904

Mayhew, S. L., & Gilbert, P. (2008). Compassionate mind training with people who hear malevolent voices: A case series report. *Clinical Psychology & Psychotherapy*, *15*, 113–138. doi:10.1002/cpp.566

Mond, J. M., Hay, P. J., Rodgers, B., Owen, C., & Beumont, P. J. V. (2004). Validity of the Eating Disorder Examination Questionnaire (EDE-Q) in screening for eating disorders in community samples. *Behaviour Research and Therapy*, *42*, 551–567. doi:10.1016/S0005-7967(03)00161-X

Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*, 85–101. doi:10.1080/15298860309032

Radloff, L. S. (1977). The CES-D scale a self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385–401. doi:10.1177/014662167700100306

Rockliff, H., Gilbert, P., McEwan, K., Lightman, S., & Glover, D. (2008). A pilot exploration of heart rate variability and salivary cortisol responses to compassion-focused imagery. *Clinical Neuropsychiatry: Journal of Treatment Evaluation*, *5*, 132–139. Retrieved from http://www.clinicalneuropsychiatry.org/

Rosnow, R. L., & Rosenthal, R. (1996). Computing contrasts, effect sizes, and counternulls on other people's published data: General procedures for research consumers. *Psychological Methods*, *1*, 331–340. doi:10.1037/1082-989X.1.4.331

SAS Institute Inc. (2008). *SAS Component Language 9.2*. Cary, NC: SAS Institute.

Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford, UK: Oxford University Press.

Spitzer, R. L., Kroenke, K., & Williams, J. B. (1999). Validation and utility of a self-report version of PRIME-MD: The PHQ Primary Care Study. *Journal of the American Medical Association*, *282*, 1737–1744. doi:10.1001/jama.282.18.1737

Striegel-Moore, R. H., Perrin, N., DeBar, L., Wilson, G. T., Rosselli, F., & Kraemer, H. C. (2010). Screening for binge eating disorders using the Patient Health Questionnaire in a community sample. *International Journal of Eating Disorders*, *43*, 337–343. doi:10.1002/eat.20694

Wasylkiw, L., MacKinnon, A. L., & MacLellan, A. M. (2012). Exploring the link between self-compassion and body image in university women. *Body Image*, *9*, 236–245. doi:10.1016/j.bodyim.2012.01.007

Werner, K. H., Jazaieri, H., Goldin, P. R., Ziv, M., Heimberg, R. G., & Gross, J. J. (2012). Self-compassion and social anxiety disorder. *Anxiety, Stress & Coping*, *25*, 543–558. doi:10.1080/10615806.2011.608842

Zich, J. M., Attkisson, C. C., & Greenfield, T. K. (1990). Screening for depression in primary care clinics: The CES-D and the BDI. *The International Journal of Psychiatry in Medicine*, *20*, 259–277. doi:10.2190/LYKR-7VHP-YJEM-MKM2

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