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An Evaluation of the Impact of Introducing Compassion Focused Therapy to a Standard Treatment Programme for People with Eating Disorders

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Objective: This study explored the outcome of introducing Compassion Focused Therapy (CFT) into a standard treatment programme for people with eating disorders. In particular, the aim was to evaluate the principle that CFT can be used with people with eating disorders and improve eating disorder symptomatology.
Method: Routinely collected questionnaire data were used to assess cognitive and behavioural aspects of eating disorders and social functioning/well being ($n = 99$).
Results: There were significant improvements on all questionnaire measures during the programme. An analysis by diagnosis found that people with bulimia nervosa improved significantly more than people with anorexia nervosa on most of the subscales. Also, in terms of clinical significance, 73% of those with bulimia nervosa were considered to have made clinically reliable and significant improvements at the end of treatment (compared with 21% of people with anorexia nervosa and 30% of people with atypical eating disorders).
Conclusion: This study demonstrates the potential benefits of using CFT with people with eating disorders and highlights the need for further research on this new approach.

Key Practitioner Message:
- CFT offers new ways to conceptualize and formulate some of the self-critical and shame-based difficulties associated with eating disorders.
- CFT offers a framework that can enable people with eating disorders to conceptualize their difficulties in different ways.
- CFT can be combined with standard therapies especially cognitive behavioural therapy.
- CFT can be especially useful in a group context where the relationships between members can become increasingly compassionate, validating, supportive and encouraging.

Keywords: Anorexia Nervosa, Bulimia Nervosa, Atypical Eating Disorders, EDNOS, Compassion Focused Therapy, Proof-of-principle

Currently, the best standard therapy for people with eating disorders, Cognitive Behaviour Therapy (CBT), achieves clinically significant improvements in about 50% of patients (Wilson, 1996). In a recent trial of two variations of CBT, 52.7% of people with bulimia nervosa, and 53.3% of those with atypical eating disorders, had clinically significant improvements (Fairburn et al., 2009). Clearly, a number of people still struggle with this disorder despite such interventions, indicating a need for improvements in psychological therapies (NICE, 2004, 2011). Improvements come with greater understanding of the processes involved in the disorder, functional analysis, and targeting therapies at those processes (Gilbert, 2007). People with eating disorders tend to be highly self-critical (Lehman & Rodin, 1989; Speranza et al., 2003) and shame-prone (Goss & Gilbert, 2002; Swan & Andrews, 2003), and these are linked to relatively poor outcomes, even in people who appear to gain symptomatic control during eating disorder treatment (Troop, Allan, Serpell, & Treasure, 2008). Self-criticism is also an independent,

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robust, and strong predictor of eating disorder symptoms (Fennig et al., 2008) and can interfere with therapy (Bulmash, Harkness, Stewart, & Bagby, 2009).

Compassion Focused Therapy (CFT) was specifically designed for people with high shame and self-criticism (Gilbert, 2000, 2009, 2010). People with these difficulties often experience high levels of external threat (fear of criticism and rejection) and internal threat (self-criticism and feelings associated with being a failure, flawed and inferior). Shame can have different forms and be associated with a range of different backgrounds including abusive, neglectful, competitive and physically nonaffectionate (Gilbert, 1998, 2002, 2009). Peer bullying (Gibb, Abramson, & Alloy, 2004) and sibling rivalry (Gilbert & Gerlsma, 1999) can also overly focus children and adolescents on feelings of inferiority and inadequacy, from which shame and self-criticism can arise. There tends to be a high incidence of childhood abuse and violence in people with eating disorders (Schmidt, Tiller, & Treasure, 1993) and high levels of pre-morbid negative self-evaluation and self-criticism (Fairburn, Cooper, Doll, & Welch, 1999; Fairburn, Welch, Doll, & Davies, 1997). A central feature for people from these backgrounds, and with high shame and self-criticism, is that they can find it very difficult to be self-reassuring or self-compassionate and be fearful of affiliative emotions (Gilbert, McEwan, Matos, & Rivis, 2011). CFT focuses on

Table 1. Overview of the psycho-education programme (Step one)

Session	Topic area
Session one: 'the facts'	What is an eating disorder? • Diagnoses and definitions • Similarities across the disorders How did I get into this? • Listening to other peoples stories • A model for understanding disorders
Session two: 'why can't I stop?'	Psychological and social factors that can maintain an eating disorder: • Eating disorder as a solution to problems • Eating disorder as a trap Biological factors that can maintain an eating disorder: • What is a healthy body weight • Calculating a healthy body weight • Set point theory of weight regulation • Over-riding the hunger-satiety system Eating disorder patterns: • Energy needs • Excessive exercise Thoughts, feelings, memories
Session three: 'the risks involved when having an eating disorder'	• Physical risks of starvation and of bulimia • Psychological costs (mood, rules, overgeneralization, sleep and concentration) • Social costs (avoiding social situations, too tired/too ill to go out, social anxiety, financial implications and impact on others) • Occupational costs (impact of symptoms, career choice and career limitation)
Session four: 'what will recovery involve?'	What is recovery? • Biological recovery (importance of normalizing eating, what is normal eating, what stops normal eating, mechanical eating and meal planning, what makes up body weight, normal body weight changes and body weight changes in recovery) • Psychological recovery (coping with the distress caused by normalizing eating and weight, preventing relapses and dealing with vulnerability factors) • Expectations of therapy (personal responsibility for change, therapist responsibility, patient responsibility and treatment types and their effectiveness) • The process and stages of change • Getting the conditions for change right (solving practical problems and getting support)

the development of affiliative emotions towards the self and others.

There is increasing evidence for the effectiveness of CFT with a range of different mental health problems. In an early study of CFT with a group of people with chronic mental health problems attending a day hospital, Gilbert and Procter (2006) found that CFT reduced self-criticism, shame, depression and anxiety. Subsequent studies have found significant improvements using CFT for people with psychotic and complex disorders (Braehler, Gumley, Harper, Wallace, & Gilbert, submitted; Laithwaite et al., 2009), personality disorders (Lucre & Corten, in press) and people presenting to a community mental health team (Stewart & Holland, 2011). Recently, Beaumont, Galpin and Jenkins (2012) compared CBT against CBT plus CFT in clients who had experienced trauma and found a nonsignificant trend for greater improvement in the CBT plus CFT group. Additionally, the CBT plus CFT produced significantly greater increases in self-compassion. As a result, Beaumont and colleagues (2012) suggest that developing self-compassion could be an important adjunct to therapy. Similarly, Ashworth, Gracey and Gilbert (2011) found CFT to be helpful in reducing shame and self-criticism for people with acquired brain injury. The authors again suggest that adding CFT to established interventions may make them more effective.

To date, however, there has been no study of CFT within an eating disorder setting. The Coventry Eating Disorders Service is the first service to introduce CFT into the treatment of eating disorders and has done so since 2002 (Goss & Allan, 2010). To maximize clinical efficiency, the service provides group-based treatments with a two-step treatment programme. In step one, patients are offered a 4-week, 2 hours per week, group-based psycho-education programme. Participants take part in the four psycho-education sessions, which are outlined in Table 1. The programme is mainly didactic teaching, with in-session written activities and homework. It is designed to help patients increase their understanding of their eating disorder and be actively involved in deciding if they are ready to engage in treatment.

An audit of the psycho-education programme indicated little significant symptom change (Moffat, 2006). However, patients reported finding it a helpful first step in introducing them to working within a group and deciding whether or not to opt in for treatment, and there was a significant increase in overall motivation to change.

Step two of the treatment programme is a 20-session group-based recovery programme. This takes place over 16 weeks, with two sessions a week for the first 4 weeks, followed by weekly sessions over 12 weeks. There is limited telephone or face-to face support between groups. Each group lasts between 2 and 2.5 hours, with 2 hours of homework tasks each week.

The original recovery programme was based on the principles of CBT for eating disorders (Fairburn, 1981). However, it was observed that many individuals struggled to experience emotional change, particularly in relation to feelings of shame and self-criticism. To address this, the head of the service (KG) and his team began introducing CFT in 2002. Table 2 gives an overview of the elements of CBT and CFT included in the programme. All members of the team facilitating the recovery programme have received formal training and/or supervised practice in both CBT and CFT. The areas covered by each session of the recovery programme are outlined in Table 3. The stages of the programme, and the number of people attending each stage between April 2002 and October 2009, are outlined in Figure 1.

Table 2. Composition of the Recovery Programme (Step two)

Cognitive Behavioural Therapy (Fairburn, 1981)	• Identification of core beliefs, maintaining behaviours and physical states • Self-monitoring • Meal planning • Cognitive challenges • Behavioural experiments • Problem solving
Compassion Focused Therapy (Gilbert & Procter, 2006; Gilbert, 2010)	• Evolutionary functional analysis • Understanding symptoms (e.g., restricting or bingeing) as related to safety and emotion regulation strategies • Understanding the origins and functions of self-criticism, shame and pride • Focus on development of affiliative motivation and emotion directed at self and others • Working on the fears and blocks to developing compassion • Developing compassionate focusing using a variety of interventions, including compassionate imagery, thinking, behaviour or emotion

Table 3. Overview of the recovery programme (Step two)

Week	Session	Topic area/aim of the session
Week 1	Session 1	• Validation and encouragement for attending • Developing group purpose and cohesion
	Session 2	• Continuing to develop group purpose and cohesion • Introducing the CBT model and self-monitoring
Week 2	Session 3	• Elaborating on the CBT model and self-monitoring
	Session 4	• Review and manage self-monitoring blocks • De-shaming discussion of eating disorder thoughts and behaviours
Week 3	Session 5	• Identification of eating disorder risks • Introduce using the group to support problem solving • Focus on coping • Introduce principles of normalized eating and meal planning
	Session 6	• Continue to work on self-monitoring, meal planning, and predicting and managing blocks to meal planning
Week 4	Session 7	• Review problems and solutions to meal planning • Introducing CFT and the underpinning theories • Explore the basic concepts of compassion and what compassion entails • Introduce compassionate interventions imagery (e.g., safe place and compassionate other imagery)
	Session 8	• Review understanding of CFT and meal planning • Understand how compassion can be used to engage with difficulties • Introduce distress tolerance skills • Introduce weighing • Prepare for individual review
Weeks 5–10	Sessions 9–14	• Manage being weighed, and identify and manage worries about weight and weighing • Develop and work on list of weight/shape related worries • Agree and work on individual recovery targets • Gradually increase planned energy intake up to minimum of 1500 calories • All of this is undertaken with a compassionate focus, using compassionate imagery (including imagining the self as compassionate), and a focus on developing compassionate thinking and behaviours.
Weeks 11–15	Sessions 15–19	• As previous sessions and increase planned energy intake up to minimum of 2000 calories • Introducing feared foods • Relapse prevention and planning for a life without an eating disorder These interventions are undertaken with a compassionate focus, using compassionate imagery, and developing compassionate thinking and behaviours.
Week 16	Session 20	• Exploring relapse prevention and goodbyes; again, this is done with a compassionate focus.

CBT = Cognitive Behaviour Therapy. CFT = Compassion Focused Therapy.

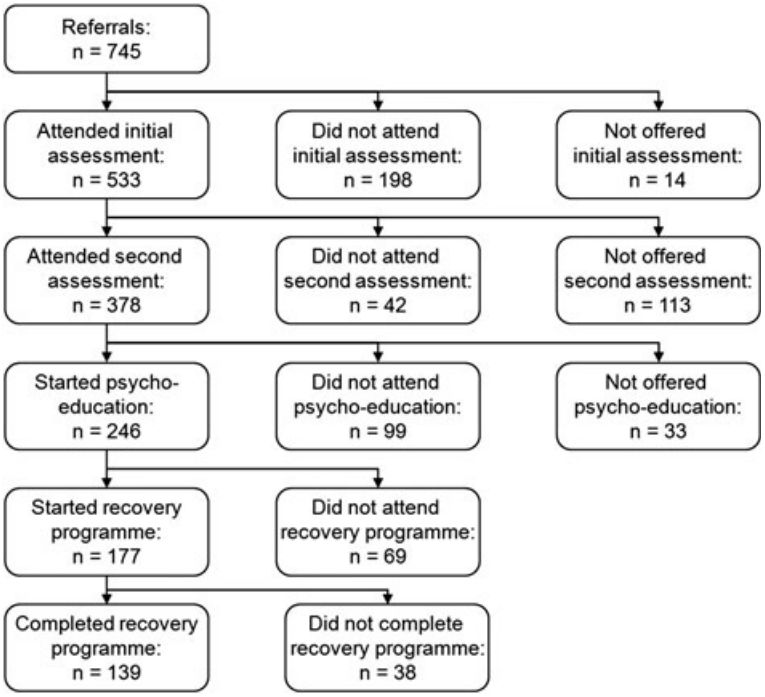

Figure 1. Overview of numbers of people at each stage of the treatment programme.

AIM

The aim of this study was to evaluate the outcome of introducing CFT into a standard CBT programme for people with eating disorders. In particular, the intention was to evaluate the principle that CFT can be used with people with eating disorders and improve eating disorder symptomatology.

METHOD

Design

This study used a repeated measures design to examine the impact of the treatment programme to establish the proof-of-principle that CFT can be used with people with eating disorders. Although not originally set up as a specific research trial, but more in terms of an audit of routinely collected data and an exploration of the acceptability and therapeutic engagement with CFT, sufficient data were gathered over the past 5 years to enable retrospective analysis of outcomes in this integrated approach.

Participants

Participants for this study were the 139 people who met the criteria for the service and completed the treatment programme at Coventry Eating Disorders Service between April 2002 and October 2009.

Procedure

Questionnaires were administrated at five different time points as part of the treatment programme: Time 1, initial assessment; Time 2, pre-psycho-education programme; Time 3, post-psycho-education/pre-recovery programme; Time 4, at the end of session eight of the recovery programme; and Time 5, at the end of the programme. The questionnaires from Times 1 to 5 were included in this study. The other time points were not included due to the reduced number of completed questionnaires; however, an analysis of change over the five time points is reported elsewhere (Gale, Gilbert, & Goss, in preparation).

Questionnaires

The Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 1994) is a self-report questionnaire, based on the well-established Eating Disorder Examination interview (Fairburn & Cooper, 1993). It is widely used to assess symptoms of eating disorders, particularly in research (Peterson & Mitchell, 2007). It consists of 28 questions about the frequency of eating disorder behaviours and severity of the psychopathological aspects of eating disorders over the

last 28 days. These produce four subscales (restraint, eating concern, weight concern and shape concern) and a global (overall) score, with higher scores indicating high symptomatology.

The Stirling Eating Disorder Scale (SEDS; Williams, Power, Miller, & Freeman, 1994) is an 80-item questionnaire designed to assess the cognitive and behavioural symptoms of eating disorders. Items are worded as statements requiring a true/false response. There are eight subscales, four dietary scales (anorexic dietary cognitions, anorexic dietary behaviours, bulimic dietary cognitions and bulimic dietary behaviours) and four nondietary scales (perceived external control, low assertiveness, low self-esteem and self-directed hostility).

The Clinical Outcomes in Routine Evaluation – Outcome Measure (CORE-OM; Evans et al., 2000) is a 34-item, self-report questionnaire relating to the past week. The CORE-OM assesses psychological distress, and it is one of the most widely used outcome measures for psychological therapies. There are four main factors: subjective well being, social/life functioning, commonly experienced problems or symptoms, and risk to the self and to others. The global level of distress is calculated as the mean score of the 34 items. For all subscales, the higher the score, the more problems/distress the individual is experiencing.

Data Analysis

Normality of distribution was assessed using measures of skewness, kurtosis and boxplots. The boxplots identified two outliers who were removed from all data analysis. Skewness ranged from 0.009 to 1.42, and kurtosis ranged from 0.0023 to 1.76. These are within the acceptable range of −2.00 to +2.00 for skewness and −5.00 to +5.00 for kurtosis (Kendall & Stuart, 1958). The risk subscale of the CORE-OM was both skewed and kurtotic, with nonclinical scores at all time points. However, risk to self or others is an exclusion criterion for acceptance to the service; thus, the risk subscale was expected to be relatively low.

There were two stages to the data analysis. First, the impact of the programme as a whole was evaluated, specifically looking at the effects of time and diagnosis. To do this, three multivariate analyses of variance (ANOVA) were carried out, each with one within-subjects variable (Time) and one between-subjects variable (Diagnosis). Where there were significant multivariate effects, univariate effects were then examined. A separate ANOVA was conducted for each scale (EDE-Q, SEDS and CORE-OM) (Tabachnick & Fidell, 2007). The global scores for the EDE-Q and CORE-OM were excluded from these analyses as they are calculated as the mean of the other subscales and would increase the likelihood of correlations and significant effects. The Bonferroni correction was used to account for the effect of multiple tests; therefore, the significance level was set at $p < 0.017$ (i.e., $p < 0.05 / 3 = 0.017$). Also, partial eta squared was calculated as a measure of the effect size. A repeated measures ANOVA was also conducted on the frequency data from the EDE-Q to look at the impact of the programme on specific eating behaviours.

Second, clinically reliable and significant change of the programme was calculated using the Jacobson and Truax (1991) method with the global score from the EDE-Q. This requires that two criteria are met for an individual to have made reliable and significant change. First, the change must exceed the standard error of measurement of the instrument; this is referred to as the Reliable Change Index (RCI). The RCI gives a standardized score, so an RCI of 1.96 (the critical value for $p < 0.05$) or greater can be considered as a clinically significant change. For this study, an RCI of 1.52 or greater was considered as clinically significant.

The second criterion is that the individual's score at the end of treatment should be statistically more likely to be found in the 'functional' population range than the 'dysfunctional' range. The typical value used by researchers is less than one standard deviation above the normative group mean (Kendall, Marrs-Garcia, Nath, & Sheldrick, 1999). For this study, the community norm data for the EDE-Q global score was used (mean = 1.55, SD = 1.21), this gives a cut-off of 2.76 (Fairburn et al., 2009; Lundgren, Danoff-Burg, & Anderson, 2004). These two steps are used to classify individuals as 'recovered' (passed the RCI and the cut-off), 'improved' (passed the RCI but not the cut-off), 'undetermined' (passed the cut-off but not the RCI; it is possible that this group was below the cut-off before treatment), 'unchanged' (passed neither the RCI nor the cut-off) and 'deteriorated' (passed the RCI in the negative direction) (Ben-Porath, Wisniewski, & Warren, 2010).

RESULTS

Demographic Data

Of the 139 people who completed the programme, 101 of them completed questionnaires at both the beginning and end of the treatment programme. This reduction in numbers is due to missing data at the end of treatment (Time 5) as this was not set up as a research study and there was not a dedicated research assistant responsible for data collection. Also, two people were outliers and thus removed from the analysis. Therefore, 99 participants were included in the analysis. The mean age of participants was 28.01 years (SD = 8.67; range = 17-62 years), and there were 95 females and four males. The majority was given a diagnosis of EDNOS (54.5%, $n = 54$), 19.2% ($n = 19$) was given a primary diagnosis of anorexia nervosa and 26.3% ($n = 26$) was given a primary diagnosis of bulimia nervosa.

Table 4. Means and standard deviations of the EDE-Q, SEDS and CORE-OM subscales at assessment and on completion of the programme

	Anorexia nervosa		Bulimia nervosa		EDNOS		Total	
	Time 1	Time 5	Time 1	Time 5	Time 1	Time 5	Time 1	Time 5
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
EDE-Q	$n = 17$		$n = 26$		$n = 53$		$n = 96$	
Restraint	4.04 (1.60)	2.44 (1.77)	3.88 (1.03)	1.48 (1.51)	3.54 (1.85)	2.09 (1.85)	3.72 (1.62)	1.99 (1.76)
Eating concern	3.55 (1.27)	2.60 (1.66)	4.04 (0.97)	1.54 (1.47)	3.20 (1.41)	1.93 (1.48)	3.49 (1.32)	1.94 (1.53)
Shape concern	4.84 (0.87)	3.88 (1.58)	5.05 (0.77)	2.96 (1.62)	4.51 (1.48)	3.43 (1.82)	4.72 (1.24)	3.38 (1.74)
Weight concern	4.47 (1.12)	3.18 (1.53)	4.75 (0.84)	2.08 (1.51)	4.15 (1.59)	2.68 (1.83)	4.37 (1.36)	2.61 (1.72)
Global score	4.22 (0.98)	3.02 (1.44)	4.43 (0.57)	2.02 (1.41)	3.85 (1.41)	2.53 (1.62)	4.07 (1.18)	2.48 (1.56)
SEDS	$n = 13$		$n = 18$		$n = 31$		$n = 62$	
Low assertiveness	20.42 (8.57)	22.51 (6.64)	19.92 (8.15)	13.59 (9.43)	21.47 (8.57)	17.80 (10.74)	20.80 (8.34)	17.57 (10.00)
Low self-esteem	25.50 (9.66)	24.86 (6.53)	23.86 (8.08)	15.44 (12.12)	22.49 (10.01)	17.14 (12.31)	23.52 (9.34)	18.27 (11.66)
Self-directed hostility	22.98 (12.53)	21.40 (11.46)	27.63 (8.32)	12.31 (9.96)	22.25 (11.70)	15.28 (14.22)	23.97 (11.10)	15.70 (12.78)
Perceived external control	16.50 (12.11)	13.75 (11.77)	16.87 (10.67)	8.82 (10.08)	17.22 (10.58)	14.21 (13.08)	16.97 (10.76)	12.55 (12.06)
Anorexic dietary cognitions	29.38 (10.31)	21.68 (13.71)	28.42 (9.16)	14.97 (12.42)	23.21 (12.73)	17.43 (15.65)	26.02 (11.49)	17.61 (14.36)
Anorexic dietary behaviours	18.38 (9.86)	12.59 (10.29)	11.10 (7.41)	5.43(7.81)	10.35 (8.13)	9.65 (9.93)	12.25 (8.79)	9.04 (9.64)
Bulimic dietary cognitions	27.70 (12.76)	17.11 (15.05)	36.42 (6.48)	21.14 (12.94)	27.42 (13.29)	18.51 (14.56)	30.09 (12.13)	18.98 (14.06)
Bulimic dietary behaviours	13.64 (11.62)	10.32 (15.53)	34.68 (7.37)	16.34 (13.54)	22.18 (13.77)	13.74 (13.90)	24.02 (13.90)	13.78 (14.07)
CORE-OM	n = 19		n = 26		n = 50		n = 95	
Well-being	2.58 (0.69)	2.14 (0.83)	2.64 (0.76)	1.36 (0.97)	2.36 (0.89)	1.74 (1.01)	2.48 (0.82)	1.71 (1.00)
Problems	2.11 (0.63)	1.84 (0.84)	2.33 (0.73)	1.25 (0.80)	1.98 (0.87)	1.48 (0.87)	2.10 (0.80)	1.49 (0.84)
Functioning	1.91 (0.70)	1.65 (0.61)	2.03 (0.56)	1.08 (0.81)	1.63 (0.76)	1.27 (0.78)	1.80 (0.72)	1.29 (0.78)
Risk	0.39 (0.62)	0.39 (0.57)	0.54 (0.51)	0.22 (0.39)	0.50 (0.69)	0.22 (0.42)	0.49 (0.63)	0.25 (0.45)
Global score	1.79 (0.57)	1.55 (0.64)	1.94 (0.53)	1.02 (0.68)	1.64 (0.72)	1.21 (0.68)	1.75 (0.65)	1.23 (0.69)

EDE-Q = Eating Disorders Examination Questionnaire. SEDS = Stirling Eating Disorders Scale. CORE-OM = Clinical Outcomes in Routine Evaluation – Outcome Measure.

Table 5. Univariate tests for the EDE-Q subscales

	Time			Time × diagnosis		
	F (df)	*p*	Partial eta squared	*F* (df)	*p*	Partial eta squared
Restraint	84.26 (1, 93)	<0.001*	0.48	2.60 (2, 93)	0.080	0.05
Eating concern	94.30 (1, 93)	<0.001*	0.50	8.29 (2, 93)	<0.001*	0.15
Shape concern	60.83 (1, 93)	<0.001*	0.40	4.29 (2, 93)	0.017*	0.08
Weight concern	96.41 (1, 93)	<0.001*	0.51	5.71 (2, 93)	<0.001*	0.11

*$p < 0.017$
EDE-Q = Eating Disorders Examination Questionnaire. SEDS = Stirling Eating Disorders Scale. CORE-OM = Clinical Outcomes in Routine Evaluation – Outcome Measure.

Impact of the Overall Programme

The means and standard deviations for each of the subscales at assessment (Time 1) and on completion of the programme (Time 5), for each diagnostic group, are provided in Table 4.

The multivariate tests for the EDE-Q showed significant main effects of Time (Wilks' $\lambda = 0.42$, $F(4, 90) = 30.92$, $p < 0.001$, partial $eta^2 = 0.58$) and Time × Diagnosis (Wilks' $\lambda = 0.84$, $F(8, 180) = 2.09$, $p = 0.039$, partial $eta^2 = 0.085$). There was no significant effect for Diagnosis (Wilks' $\lambda = 0.95$, $F(8, 180) = 0.57$, $p = 0.80$, partial $eta^2 = 0.025$). The univariate tests for the EDE-Q are given in Table 5. The univariate analyses showed that the main effect for Time was significant for all subscales, with large effect sizes. The Time × Diagnosis effect was significant for all subscales except the restraint subscale, with medium effects sizes. Looking at the interaction graphs for the Time × Diagnosis effects, it is the people with bulimia nervosa who improve most between Times 1 and 5.

For the SEDS, the multivariate tests showed significant main effects of Time (Wilks' $\lambda = 0.62$, $F(5, 52) = 4.03$, $p = 0.001$, partial $eta^2 = 0.38$), Diagnosis (Wilks' $\lambda = 0.55$, $F(16, 104) = 2.31$, $p = 0.006$, partial $eta^2 = 0.26$) and Time × Diagnosis (Wilks' $\lambda = 0.56$, $F(16, 104) = 2.20$, $p = 0.009$, partial $eta^2 = 0.25$). The univariate tests, provided in Table 6, showed that the main effect for Time was significant for all subscales except the low assertiveness subscale, with medium to large effect sizes. The Diagnosis and Time × Diagnosis effects were only significant for the bulimic dietary behaviours subscale, with a medium effect size. The interaction graph showed that the people with bulimia nervosa improve more than the other two groups between Times 1 and 5.

The multivariate tests for the CORE-OM showed significant main effects of Time (Wilks' $\lambda = 0.63$, $F(4, 89) = 13.26$, $p < 0.0001$, partial $eta^2 = 0.37$) and Time × Diagnosis (Wilks' $\lambda = 0.81$, $F(8, 178) = 2.15$, $p = 0.013$, partial $eta^2 = 0.10$). There was no significant effect for Diagnosis (Wilks' $\lambda = 0.93$, $F(8, 178) = 0.85$, $p = 0.56$, partial $eta^2 = 0.037$). The univariate tests, provided in Table 7, showed that the main effect for

Table 6. Univariate tests for the SEDS subscales

	Time			Diagnosis			Time × Diagnosis		
	F (df)	*p*	Partial eta squared	*F* (df)	*p*	Partial eta squared	*F* (df)	*p*	Partial eta squared
Low assertiveness	4.37 (1, 59)	0.041	0.069	1.49 (2, 59)	0.26	0.048	3.14 (1, 59)	0.051	0.096
Low self-esteem	9.07 (1, 59)	0.004*	0.13	2.05 (2, 59)	0.14	0.065	1.65 (1, 59)	0.201	0.053
Self-directed hostility	16.42 (1, 59)	<0.001*	0.22	0.62 (2, 59)	0.54	0.021	3.62 (1, 59)	0.033	0.11
Perceived external control	12.93 (1, 59)	0.001*	0.18	0.44 (2, 59)	0.65	0.015	1.87 (1, 59)	0.163	0.06
Anorexic dietary cognitions	22.71 (1, 59)	<0.001*	0.28	1.04 (2, 59)	0.36	0.034	1.75 (1, 59)	0.183	0.056
Anorexic dietary behaviours	10.27 (1, 59)	0.002*	0.15	3.66 (2, 59)	0.03	0.11	2.23 (1, 59)	0.116	0.07
Bulimic dietary cognitions	26.49 (1, 59)	<0.001*	0.31	2.32 (2, 59)	0.11	0.073	0.84 (1, 59)	0.435	0.028
Bulimic dietary behaviours	29.82 (1, 59)	<0.001*	0.34	5.81 (2, 59)	0.005*	0.17	5.16 (1, 59)	0.009*	0.15

*$p < 0.017$
EDE-Q = Eating Disorders Examination Questionnaire. SEDS = Stirling Eating Disorders Scale. CORE-OM = Clinical Outcomes in Routine Evaluation – Outcome Measure.

Table 7. Univariate tests for the Clinical Outcomes in Routine Evaluation – Outcome Measure subscales

	Time			Time × Diagnosis		
	F (df)	*p*	Partial eta squared	*F* (df)	*p*	Partial eta squared
Well being	40.14 (1, 92)	<0.001*	0.30	4.12 (2, 92)	0.019	0.082
Problems	46.24 (1, 92)	<0.001*	0.33	6.50 (2, 92)	0.002*	0.12
Functioning	40.40 (1, 92)	<0.001*	0.31	6.65 (2, 92)	0.002*	0.13
Risk	9.92 (1, 92)	0.002*	0.097	1.88 (2, 92)	0.16	0.039

*$p < 0.017$

Table 8. Changes in eating behaviours as reported on the Eating Disorder Examination Questionnaire

Eating behaviour (reported as episodes in the past 4 weeks)	Time 1	Time 5	Analysis of variance	
	M (SD)	M (SD)	*F* (df)	*p*
Binge eating ($n = 79$)	9.82 (15.71)	4.56 (7.90)	9.75 (1, 78)	0.0025 *
Vomiting ($n = 83$)	12.11 (24.49)	6.61 (17.25)	4.85 (1, 82)	0.030
Laxative use ($n = 85$)	3.54 (8.87)	2.29 (6.17)	2.94 (1, 84)	0.090
Diuretic use ($n = 87$)	0.93 (3.76)	0.15 (1.09)	3.45 (1, 86)	0.067
Excessive exercise ($n = 86$)	8.69 (21.65)	2.14 (6.32)	9.48 (1, 85)	0.0027*

*$p < 0.01$

Time was significant for all subscales, with large effect sizes. The Time × Diagnosis effect was significant for the problems and functioning subscales, with medium effect sizes. Looking at the interaction graphs for all Time × Diagnosis effects, it is the people with bulimia nervosa who improve most between Times 1 and 5.

To summarize, there were significant improvements on all subscales between Times 1 and 5, with the exception of the SEDS low assertiveness subscale. There was also a significant impact of diagnosis at the two time points for many of the subscales; with people with bulimia nervosa improving more than those with anorexia nervosa or EDNOS on measures of eating concern, shape concern, weight concern, bulimic dietary behaviours, problems and functioning.

Table 8 gives the frequency of the five eating disorder behaviours from the EDE-Q, with the significance level set at $p < 0.01$ (i.e., 0.05 / 5). These data showed significant reductions in binge eating and excessive exercise. However, these data should be interpreted with caution due to the large standard deviations and some extreme scores.

Clinical Significance of the Programme

Table 9 gives the percentage of participants making clinically reliable and significant change. The results show that the programme is particularly effective for people with bulimia nervosa, with 73% considered to be 'recovered' at the end of treatment and 4% 'improved'. In regard to anorexia nervosa, 21% of the group were considered 'recovered', with another 37% either making a significant improvement or scoring below the cut-off on the EDE-Q ('undetermined'). In regard to EDNOS, 30% was considered to be 'recovered', with another 30% either classed as 'improved' or 'undetermined'.

DISCUSSION

This study aimed to evaluate the outcome of introducing CFT into a standard CBT programme for people with eating disorders, with a view to proving the principle that CFT can be

Table 9. Clinically reliable and significant change on the EDE-Q

	Anorexia nervosa *n* (%)	Bulimia nervosa *n* (%)	EDNOS *n* (%)	Total *n* (%)
Recovered	4 (21)	19 (73)	16 (30)	39 (39)
Improved	2 (11)	1 (4)	2 (4)	5 (5)
Undetermined	5 (26)	2 (8)	14 (26)	21 (21)
Unchanged	6 (32)	4 (15)	20 (37)	30 (30)
Deteriorated	0	0	1 (2)	1 (1)
Missing	2 (11)	0	1 (2)	3 (3)

EDE-Q = Eating Disorders Examination Questionnaire. 'recovered' = passed the RCI (1.52) and the cut-off (2.76). 'improved' = passed the RCI but not the cut-off. 'undetermined' = passed cut-off but not the RCI; it is possible that this group were below the cut-off before treatment. 'unchanged' = has passed neither the RCI nor the cut-off. 'deteriorated' = passed the RCI in the negative direction.

used with people with eating disorders. The results of the evaluation support this principle. The main findings are that there are significant improvements on all of the EDE-Q, SEDS and CORE-OM subscales during the treatment programme. The data suggest that introducing CFT does not worsen outcomes. In addition, although only anecdotal evidence, the clinicians reported that patients understood the model and could see the value of it, even those who may not have improved as much as the other participants.

When broken down by diagnosis, it is the people with bulimia nervosa (and EDNOS to some degree) who seem to particularly benefit from the programme. Although those with anorexia nervosa show more modest changes, 33% of people with anorexia nervosa were considered 'recovered' (i.e., made clinically reliable and significant improvements during the programme) or 'improved' (i.e., made clinically significant improvements) at the end of treatment, and a further 26% scoring within the 'functional' range on the EDE-Q (but the change was not statistically reliable). In a population for which there is very limited evidence for any effective treatment, particularly in groups (Leung, Waller, & Thomas, 1999), this is a promising result. Thus, this evaluation offers encouraging evidence that a CFT programme can be used with people with bulimia nervosa, anorexia nervosa and EDNOS.

Interestingly, given the focus of CFT, there was only a small change in self-directed hostility in the anorexia nervosa group. A much larger improvement was noted in the bulimia and EDNOS groups (Table 4). A study looking at the critical voice of people with anorexia nervosa found that participants felt they were dependent on the voice, believing that they were unable to function without it, and they experienced a sense of loss when they started to fight back against the voice (Tierney & Fox, 2010). This suggests that the attachment to the critical 'voice' is particularly strong for people with anorexia nervosa and that therapists need to be sensitive to this when working with them. In addition, a number of recent studies have shown that some people with high self-criticism show aversive responses to compassion, at least to begin with, and these need to be worked through in therapy (Gilbert et al., 2011; Longe et al., 2010; Rockliff, Gilbert, McEwan, Lightman, & Glover, 2008). On the basis of these results, and anecdotal reports from patients and clinicians, more time is now being spent working with the fear of, and blocks to, compassion with the hope that self-criticism will be further improved.

As CFT aims to reduce self-criticism and shame, and to increase self-compassion, further questionnaire measures have recently been introduced to the programme to specifically assess these areas; these are given at the same time points as the other measures. A recent evaluation exploring the impact of the programme on these measures found a significant reduction in internal shame, external shame and self-criticism, and an increase in self-compassion (Holtom-Viesel, 2010). These results support the findings of the current study, which suggest that using CFT, which specifically targets self-criticism, shame and self-compassion, impacts on the symptoms and psychopathology of eating disorders.

The results of this evaluation are comparable with other evaluations of eating disorders services. For instance, the Oxford Adult Eating Disorder Service, which reports on a combination of CBT-based, day and out-patient treatments (Peake, Limbert, & Whitehead, 2005). However, neither standard deviations nor effect sizes are included in the Oxford paper, making statistical comparisons difficult. Also, the evaluation of the Oxford service includes both inpatients and outpatients, further exacerbating the difficulties in drawing any clear comparisons between the two services.

Limitations

As is common when using routinely collected data, large numbers can be referred to the service, but there are many avenues to disengage or to be referred to other services along the way. In addition, as this is routine clinical data that were not supported by any research assistant but were reliant on clinicians and volunteers, there were many incidences of missing data. This was counteracted where possible by using mean scores for scales if one or two items were missing. However, for those who had a whole set of scales, missing their data could not be included, hence the reduction from 139 people who completed the programme to 99 people with data at the beginning and the end of the programme. However, despite the missing data, the sample size was comparatively large for an evaluation study. Whereas the evaluation of the eating disorder service in Oxford included 110 patients (Peake et al., 2005), other published evaluation studies have included between 44 and 65 patients (Gerlinghoff, Backmund, & Franzen, 1998; Piran, Langdon, Kaplan, & Garfinkel, 1989; Willinge, Touyz, & Thornton, 2010). Data issues also led to difficulties in undertaking longer term follow-up, with limited outcome data for 6 months and beyond. Given the small numbers, these outcomes are not reported on.

Another limitation of this evaluation is in discriminating between the CBT and CFT aspects of the programme. The introduction of CFT has been gradual, and the programme is more compassionately focused now than it was when it was first introduced. This makes it difficult to determine which aspects of the programme led to the improvements or, indeed, if it was a combination of the two. As for all therapies, CFT needs to be evaluated as part of a randomized controlled trial compared with CBT.

Future Research

These data provide the basis for further research to better evaluate CFT in its own right. There are many research avenues for this development. First would be to obtain qualitative data about the actual experience of patients

experiencing CFT as patient experience is a key element of therapy development (NICE, 2004). Qualitative data from people with depression suggest that they recognize the value of compassion and of trying to become more self-compassionate but also articulate a number of difficulties in being able to do so (Pauley & McPherson, 2010).

Second, research must also look at the objective measures of change and the degree to which CFT offers advantage on efficacy, as part of a randomized controlled trial. It is not just scores at the end of treatment that are important but also whether or not, by engaging with compassion processes, this has an impact on relapse rates. Thus, follow-up data are essential for future research. Certainly, CFT would argue that if you create a more affiliative orientation to self and others, this could reduce vulnerability.

Third, increasingly research in psychotherapy is recognizing that it is not only symptom reduction that needs to be the focus for research but also aspects such as quality of life and social functioning. Again, because CFT focuses on affiliative development, it would be anticipated that it would have an impact on quality of life and social functioning.

Conclusion

This study aimed to explore the principle that CFT can be used with people with eating disorders. Clearly, this is just a first step to exploring the value of developing a compassion focused approach for the difficulties people experience within their eating disorders. However, the results of this study are encouraging. Clinicians report that patients understood the model and its value, even if they struggled to implement it for themselves. The programme significantly reduced symptomatology across a range of measures, particularly for people with bulimia nervosa and EDNOS, and to a lesser extent for people with anorexia nervosa.

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