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Compassion Focused Therapy: a systematic review of its effectiveness and acceptability in clinical populations

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Abstract

Introduction

Compassion focused therapy (CFT) is an increasingly popular therapeutic modality. Its holistic and integrative approach to universal human suffering means that it is well-placed as a transdiagnostic therapy. Research into its
effectiveness and acceptability has increased over the previous 10 years as the therapy has evolved, and to help consider its status as an evidence-based therapy research concerning its treatment outcomes needs evaluating.

**Areas covered**

This paper reviews research investigating the effectiveness of CFT in clinical populations.

**Expert opinion**

CFT shows promise for a range of mental health problems, especially when delivered in a group format over at least 12 hours. This is important for funding bodies and commissioning groups to consider as they allocate healthcare resources in light of current evidence-based practice. CFT is demonstrably well accepted by clients and clinicians and there is now a clear need for an updated, universally deployed, standard manual to direct future research. This will be critical in enabling widespread implementation and further adoption into mainstream clinical practice, will address the lack of standardization in current research and pave the way for further randomized control trials aimed at reducing existing methodological limitations.

**Keywords:** CFT, Compassion focused therapy, compassion, mental health, psychotherapy, psychological therapy

**Article highlights**

Clinical Implications:

- CFT has positive effects on individuals with a range of mental health problems and is likely to be more effective than no psychological
treatment, and equally or possibly more effective than other interventions.

- CFT increases self-compassion and also leads to a reduction of mental health symptomatology, even among difficult to treat populations such as forensic populations, eating disorders and personality disorders.
- Group CFT currently has significantly more evidence of effectiveness than individual and self-help interventions.
- The findings indicate that at least 12 sessions of CFT are required to significantly reduce clinical symptomatology across populations.

Limitations:

- There are a lack of studies evaluating the effectiveness of individual CFT.
- Studies varied in the content of CFT interventions with a lack of intervention fidelity.
- As 24 of the 29 studies did not compare CFT to an alternative therapy, it is important to consider that the apparent effectiveness may be attributable to a ‘psychological intervention’ rather than CFT per se.

1.0 Introduction

1.1 Compassion Focused Therapy (CFT)

CFT has its origins in evolutionary and attachment theories and in Eastern traditions. It aims to bring compassion to human suffering. In this context
compassion can be defined as “a sensitivity to suffering in self and others, with a commitment to try to alleviate and prevent it” [1].

CFT focuses on three dynamic ‘flows’ in social-interactional environments such that compassion, as a motivation, can be directed from oneself to another, from another to oneself, or from oneself to oneself (i.e. self compassion).

Recent meta-analytic work [2] exploring fears of compassion relating to these three flows indicates that fears of self compassion and fears of compassion from another to oneself exhibit the strongest correlations with shame, self-criticism and depression. In addition, clinical populations were found to exhibit a significantly stronger relationship between fears of self compassion and mental health difficulties, when compared to non-clinical populations.

CFT aims to facilitate the development of compassion through the ‘two psychologies’ of 1) engagement with and 2) the alleviation/prevention of suffering. Engagement attributes to develop as part of the therapy include sensitivity, sympathy, empathy, care for wellbeing, non-judgement and distress-tolerance [3], while alleviation/prevention competencies include developing skills in imagery, reasoning, behavior, sensory, feeling and attention focusing.

It has been proposed [1] that a number of functionally specific, innate, social motivation systems are involved in the development and maintenance of common mental health problems. CFT is accordingly underpinned by *social mentality theory*, which posits that differing mentalities organize not only our own minds but also our experience of the minds of others (with attendant goal related emotions, cognitions and behavior) in different ways. For example, if in a care eliciting/seeking social mentality one may seek protection, safeness or reassurance from another, while simultaneously viewing them as a source of
care. Associated threats and fears in this state may then be linked to concerns over the withdrawal, unavailability or withholding of care by others. Similarly, if in a care giving mentality one may provide protection, safeness or reassurance, view others as in need of this and fear potential overwhelm in relation to their need or one’s inability to provide sufficient care. Other social mentalities include co-operation (i.e. seeing oneself of value to others, seeing others as valuing one’s contributions and fearing being cheated or unappreciated), competition (i.e. seeing oneself and others in terms of inferior-superior relational dynamics, with fears of being subordinated, shamed or lessened) and sexual (i.e. seeing oneself and others as both desiring and desirable and with fears of rejection).

The aim of CFT therefore is often to help clients replace competition based social mentalities, which can lead to experiences of shame and self-criticism, towards care-based mentalities which promote validation, support and encouragement.

In keeping with social mentality theory, the CFT model suggests that humans have three emotional regulation systems that developed to ensure our survival as a species by avoiding harm, seeking out resources and caring for our offspring. First the ‘threat system’, which prioritizes being on the look-out for, and reacting to danger in the environment [4], results in the flight/fight/freeze response (fleeing danger, defending against danger and becoming immobilized) and leads to emotions such as anxiety, anger, fear and disgust. Second the ‘drive system’ motivates striving and seeking out resources, and results in feelings of excitement and vitality [5]. Third the ‘soothing system’ is rooted in early attachment experiences [6,5] is centered on care-giving and is associated with feeling calm, content and peaceful. This latter system is also perceived to
play a role in facilitating engagement in close interpersonal relationships and
the ability to soothe one another and is central to the development of
compassion [7].

As with other motivations, compassion can falter in the face of fears, blocks and
resistances (FBRs). These act to suppress or prevent compassion such that it is
either not engaged with or acted upon [2]. Fears relate to avoidance and can
result from beliefs that compassion is weak, unhelpful, may be upsetting, or
even overwhelming. Blocks relate to environmental constraints, or indeed an
inadequate sense of the cause of suffering, while resistances relate to
instances when compassion could be present but is either felt pointless or
disadvantageous in some way. FBRs are actively explored as part of CFT and
worked with to facilitate/cultivate helpful expressions of compassion emerge.

Formulation is another key component of CFT and allows the development of a
greater understanding of ones’ early shame memories, key fears, and safety
strategies developed in attempt to keep oneself physically and emotionally safe.
Developing a shared understanding of a CFT formulation paves the way for the
cultivation of compassion for one’s early experiences and emotional suffering,
and the belief that things may not be one’s fault, but instead evolution’s attempt
to maintain one’s survival in response to threat. Following this, therapy focuses
on down-regulating the threat system through the practice ‘soothing rhythm
breathing’, noticing when ‘threat’ is activated, and responding to self-criticism
with compassionate thinking, imagery and behavior. Individuals are helped to
develop compassion for themselves, for others, and to increase their openness
in receiving compassion from others (i.e. to experience the three flows).

1.2 The Benefits of Compassion
Those with high levels of self-criticism tend to judge themselves harshly for their perceived weakness and inadequacies, with a lack of sensitivity to their own suffering. A growing body of research suggests that having greater levels of self and other compassion has positive effects on wellbeing [8] and quality of life [9]. A meta-analysis found that greater self-compassion is associated with fewer mental health difficulties, yet lower self-compassion is associated with increased psychopathology [10]. A more recent meta-analysis evaluating 21 RCTs of compassion interventions found significant improvements in self-compassion, anxiety, depression, mindfulness, psychological distress and overall wellbeing, however small sample sizes undermined methodological rigor [11].

An initial review of CFT [12], which searched the literature up to April 2012, found a lack of rigorously designed trials. Out of the identified fourteen studies that evaluated the effectiveness of CFT across clinical and non-clinical populations, only three were randomized control trials (RCTs), with the majority consisting of observational studies as well as an N=1 and a case series. The authors concluded that whilst CFT is increasing in popularity, there lacks an evidence-base for its use, with more large-scale, high quality trials needed.

1.3 Assessing Acceptability

Whilst the potential effectiveness of interventions can be shown through improvements on outcome measures of various psychological constructs, the acceptability of interventions has become a key consideration in their evaluation [13] however its measurement is less clearly defined. Studies commonly report attrition rates as a variable of acceptability. Those who receive their preferred
intervention are a third to a half less likely to drop out of therapy compared to those who do not receive their preferred treatment option [14]. The Medical Research Council’s guidelines [13] for evaluating complex interventions suggest using both quantitative and qualitative measures of acceptability and satisfaction, including how patients are interacting with the intervention (such as engaging in therapeutic tasks).

1.4 Aims
This review aims to examine the effectiveness and acceptability of CFT in clinical populations and to update the previous review [12] of the psychotherapeutic benefits of CFT.

2.0 Method
2.1 Search strategy
A systematic review of the literature was conducted using the databases PsychInfo, Web of Science and MedLine. The search terms used variations of two terms: compassion and therapy. The search terms for compassion were ‘compassion’, ‘compassionate’, ‘compassionate mind’ and ‘compassion-focused’. The search terms for therapy were: ‘treatment’, ‘therapy’, ‘training’, ‘therap$’ and ‘intervention’. These terms were based upon the previous review of CFT [12], in order to update the review by incorporating more recent findings. Searches were conducted so that at least one term from each category was required for a study to be included in the search results. The search covered the dates from the inception of CFT (2000) up until July 2019.

2.2 Inclusion criteria:
1. Population: clinical populations, defined as experiencing symptoms of any mental health condition, including depression, psychosis, post-traumatic stress, eating disorders etc.

2. Intervention: compassion focused therapy, as defined by those delivering the intervention and deemed to have covered core components (such as psychoeducation on tricky brain and three emotion regulation systems, and practices including soothing rhythm breathing and compassionate imagery).

3. Comparison: Compared with any control group (including TAU, other interventions), or no comparator

4. Outcome: Improvements in mental health symptoms, self-compassion and self-criticism, drop-out rates and measures of adherence or satisfaction.

5. Published in a peer reviewed journal

6. RCT, controlled trials and observational designs

2.3 Exclusion criteria

1. Studies solely experimental in nature

2. Correlational design

3. Case series and N=1 design

4. No Grey literature (defined here as materials and research produced by organizations outside of the traditional commercial or academic publishing and distribution channels) was featured as a part of our review

2.4 Screening and selection
All paper titles were screened for relevance, and the abstracts were reviewed for those that appeared relevant. Any studies that referred to a compassion-based therapy were included for further detailed screening. Full articles were read and checked against the above inclusion and exclusion criteria. See figure 1.

(Figure 1 near here)

2.5 Quality assessment
In order to assess the quality of and risk of bias in the studies, a methodological quality checklist was completed for each study [15]. The tool contains 27 items, 26 of which are scored either ‘yes’ or ‘no’ (and given a score of one or zero, respectively), and item 27 is given a score out of five. The tool covers core domains such as reporting of findings, external validity, study bias, confounding and selection bias, and power. Quality checks were conducted separately by two reviewers (authors Craig and Hiskey) and inter-rater reliability (percentage agreement) was 79%; any score disagreements were resolved through discussion. For ease of comparison the papers were given an overall percentage score.

3.0 Results
Table 1 summarizes the findings of the electronic database search. 29 studies were identified. There were nine RCTs, three controlled trials, and 17 observational studies. 21 new studies were identified in the seven-year period since the last review, eight of which were RCTs, two were controlled trials and 11 were observational. Methodological quality scores ranged from 31 to 75%. The results of the search will be outlined in order of quality of methodological
design and outcomes discussed in light of their quality ratings, followed by an outline of how the nature and dose of CFT impacts upon outcome.

(Table 1 near here)

3.1 Summary of RCTs

Nine RCTs were identified in the search, with the populations: borderline personality disorder (BPD), eating disorders (ED), depression, psychosis, opioid use disorder (OUD) and mothers of children with ADHD who have depression. Six were group-based. Quality ratings of their methodological rigor ranged from 50 to 78%, which were amongst the highest ratings across the studies. The CFT interventions varied in nature, content, intensity, and clinician involvement, and varied in duration from two weeks compassionate letter writing to 16 weekly therapy sessions. The briefest and least clinician intensive was Kelly and Waring’s [16] two-week compassionate letter writing intervention for non-treatment seeking individuals with anorexia, which involved an initial meeting to provide the rationale, explanation and practice, followed by writing daily letters over a two-week period. The study quality was rated at only 50% - the lowest of all the RCTs - due to low external validity and limited power. High retention was reported, and small to medium effect sizes were found for changes in shame and self-compassion.

Kelly and Carter's [17] three-week self-help intervention for binge-eating disorder (BED) was also brief, involving participants viewing PowerPoint slides outlining the intervention rationale, and being encouraged to respond compassionately towards themselves when they had the urge to binge. This was compared against a behavioral self-help intervention and waitlist control.
The study’s quality was rated as 63% due to low external validity. Small to medium effect sizes were reported.

Duarte et al. [18] also trialed a four-week self-help intervention for BED, which followed an initial group session. In comparison to the waitlist control group significant reductions were found in eating psychopathology, with medium to large effect sizes. The study quality was rated at 63%. Feliu-Soler et al.’s [19] three-week group intervention was also brief; however, it followed a 10-week mindfulness intervention. The group covered psychoeducation on compassion and loving kindness meditations and compassion meditations were practiced during the sessions, as were practices from Gilbert’s [20] CFT, and Neff and Germer’s [21,22] mindful self-compassion program. The quality rating was 56% due to low external validity and no consideration of effect sizes or power.

Carlyle et al., [23] trialed a short three-week group for those with opioid use disorder (OUD), compared to a relaxation group and waitlist control. Post-CFT participants rated themselves as having increased desire to use opioids, as well as making more effort to resist the urge. The study had a quality rating of 59% due to its feasibility nature. Navab et al. [24] ran an 8-week group for mothers of children with ADHD, and found in comparison to a waitlist, psychological symptoms significantly decreased. However, with only 10 participants in each group there was a lack of power, and the study quality was rated 50%. Kelly et al., [25] carried out a pilot RCT of a 12-week group compared to TAU for ED. Medium to large effect sizes were reported across all ED subtypes in the intervention group. The study quality was 75% due to being well-powered and thoroughly reported.
Noorbala et al.’s [26] group was more clinician and time-intensive, with a total of 24 hours over 6 weeks. Their intervention was based upon Gilbert’s [27] ‘Manual of Compassionate Mind Training’, covering the treatment rationale, psychoeducation on self-criticism, compassion and self-compassion. Its quality rating was 72%. It was the only study that included a full power calculation to validate the findings, which reported an 81-83% power. The RCT was conducted in a clinical setting, increasing its external validity. Braehler et al. [28] had the greatest intensity of time and clinician involvement, covering a total of 32 hours over a period of 16 weeks and run by two clinical psychologists. This study trialed the group CFT for psychosis manual [29]. The study quality was rated at 78%. The authors did not adequately power the study as its aim was to determine feasibility, yet they did report small to moderate effect sizes.

Five of the nine studies compared CFT to an active treatment: continuation of mindfulness, behavioral self-help, group relaxation and TAU. All but one of the RCTs [23] found significant changes in primary outcomes: importantly, not only did participants’ levels of self-compassion increase across the studies, symptoms of psychopathology decreased in all clinical groups, which was not seen in the control groups. An exception to this was Noorbala et al.’s [26] depressed sample; only a non-significant reduction in self-criticism and symptoms of depression and anxiety post-intervention were seen. Significant reductions in depression and anxiety were however found at follow up.

3.2 Summary of controlled trials

Three trials were identified that compared CFT to another group, but participants were non-randomized. Beaumont et al. [30] recruited individuals who had experienced trauma and were assigned to receive 12 weekly individual
sessions of either Cognitive Behavioral Therapy (CBT) or CBT with CMT. The CBT and CMT group received trauma-focused CBT plus compassionate imagery, letter writing and grounding techniques. Both groups saw an improvement in clinical symptoms (anxiety, depression, avoidance behavior, intrusive thoughts and hyper-arousal) and increased self-compassion, however the CBT plus CMT group saw a statistically greater increase in compassion, and a non-significant trend in greater symptom reduction. The overall study quality was 50%. Beaumont et al. [31] carried out a similar trial with fire-service personal with trauma symptoms, comparing trauma-focused CBT (TF-CBT) plus CFT with TF-CBT only. TF-CBT plus CFT was more effective at increasing compassion, but both groups saw significant improvements in trauma symptoms. The study quality was rated at 50%. Cuppage et al. [32] carried out a large trial comparing 54 hours of group CFT to TAU with 87 patients open to inpatient and outpatient services in Ireland. Large effect sizes were found for changes in psychopathology, which were maintained at the 2-month follow up. The study quality was rated as 75% due to good internal validity and it being well-powered.

3.3 Summary of observational studies

The 17 observational studies covered a variety of populations: depression, acquired brain injury (ABI), ED, PTSD, learning disability (LD), psychiatric inpatient, personality disorder, severe and enduring mental health problems, forensic and dementia. All but three studies delivered the intervention as part of a group. Ashworth et al. [33] delivered a combination of group and individual sessions of CFT. The studies varied in duration of the CFT groups, ranging from one-off sessions on an acute psychiatric ward [34] to up to 34 individual
sessions [35] for those with bulimia. Quality ratings varied from 31 to 66%, typically due to no randomization processes or comparators, participants being unrepresentative of the typical clinical population from which the sample was drawn, and, for some, a lack of clarity over compliance to the intervention and incomplete reporting of data. 15 of the 17 studies found significant improvements in measures of psychopathology and seven reported that the gains had been maintained at follow up [33,36,37,38,39,40,41]. Moderate to large effect sizes were reported in ABI [33]; severe and enduring mental health problems [42]; chronic depression [38,36]; anxious and depressed university students [41]; and depression in dementia [43]. Four of the observational studies did not report measures of mental health difficulties, however they all found significant changes following CFT: decrease in self-criticism [44,45] increases in self-compassion [45,46], and an increase in calmness and post-session distress [34].

3.4 Nature and dose of CFT intervention

The studies varied in intensity and duration of CFT. Importantly, all but eight of the studies delivered the CFT solely as part of a group, all finding positive effects on outcomes and suggesting that group CFT is likely to have beneficial effects on mood. Four of the RCTs [28,25,24,26], found favorable results of group CFT in comparison to waitlist control and TAU, the findings of which have been confirmed in evaluation of similar groups in clinical settings [42,47,38,39,45]. Feliu-Soler et al.’s [19] RCT found group CFT was superior than a mindfulness group in reducing symptoms of BPD and in increasing self-compassion. Six studies evaluated individual CFT. The findings showed that individual integrated CBT and CFT is as effective as stand-alone CBT for
trauma [30,31], with some indication of greater improvement in self-compassion and symptoms of trauma. Au et al., [37] found that individual CFT was an effective treatment for PTSD, with gains maintained at one-month follow up. Individual CFT was found to be an effective treatment for bulimia and for depressed university students with maladaptive perfectionism [35,41]. There were also large effect sizes in Ashworth et al.’s [33] ABI sample, although they also delivered initial group CFT as part of their intervention. This indicates CFT may be feasible to deliver on an individual basis, with some indication that it could be as effective as group CFT. However, it is difficult to draw firm conclusions given that none of these studies used a randomized design, with an average quality rating of 49%. Findings from three RCTs suggest that CFT may be feasible and effective to deliver via self-help in ED populations [17,16,18], yet further higher-powered research in clinical settings is warranted to evaluate its generalizability.

The dose of CFT ranged from two hours of direct clinician time [17,16], to up to 52 hours in Cuppage et al., [32]. Ten studies delivered CFT in less than nine hours, all finding positive effects on outcomes. However, fewer significant findings were found in these studies, indicating a CFT dose of less than nine hours may lead to some change but it may be insufficient to result in clinically significant and reliable change that is maintained over time. Eleven studies delivered 10-24 hours of CFT and saw significant changes in depression, anxiety, PTSD, ED symptomatology, depression in dementia, self-compassion, shame and self-criticism. Four reported these changes were maintained at follow up. The remaining eight studies delivered between 27 and 52 hours of CFT and saw similar significant changes as those delivered in fewer hours. The
strongest effect sizes were found among the studies providing over 12 hours.
Similarly, notable findings were reported in complex populations, i.e. personality disorder [40], forensic [39], and ED [25,48,35], with gains often maintained at follow up.

3.5 Acceptability of CFT

3.5.1 Attrition

Drop-out rates across the studies ranges from low (0% in Asano et al., [36]) to high (52% in McManus et al., [45]), however the latter included those who were invited and did not commence the group. High retention rates were found in those with dementia (94%; Collins et al., [43]), depression (100%, Asano et al, [36]), perfectionism (96%, Rose et al., [41]) and intellectual disabilities (86%, Clapton et al., [44]). Those with the lowest number of completers were populations with severe and complex mental health problems: Heriot-Maitland et al. [34] found that only 66% of patients on a psychiatric ward remained for the majority of one session, and Gilbert and Proctor [47] found only 67% of patients attending a day center (with long-term and severe mental health problems) completed their 12-week group. Although this differs from Laithwaite et al. [39], and Braehler et al. [28]: the former found that 18 out of 19 males on a maximum secure unit completed the 20-session group over 10 weeks and the latter found that 82% of their community psychosis sample completed the 16-session group. Of those who did drop out in the Braehler et al. [28] sample, all did so within the first four sessions. Judge et al. [49] regarded ‘completers’ as those who had attended eight or more sessions (out of 12-14), which equated to 86% of their CMHT sample.
Attrition among the self-help interventions varied: Kelly and Waring’s [16] letter writing intervention retained 95% of participants, and only six of 41 of Kelly and Carter’s [17] BED sample dropped out, with four of these from the self-compassion intervention (compared to one in the behavioral intervention and one in waitlist control). However, Duarte et al.’s [18] self-help for binge-eating saw a drop-out rate of up to 50%.

3.5.2 Satisfaction and compliance

Several studies measured levels of acceptability of CFT and compliance with the intervention. All those that were investigating acceptability and feasibility of CFT deemed the interventions to be both feasible and acceptable. Duarte et al. [18] found despite moderate attrition rates most of the participants who completed rated the practices as ‘very useful’ and the materials were ‘very important’. Clapton et al.’s [44] ID sample reported that they understood the group content and process and experienced the practices and group as helpful. Graser et al. [38] reported that the completers in their chronic depression sample reported ‘overall satisfaction’ with the program, as measured on a 1-7 Likert scale (not at all helpful to very helpful), with a mean score of 5.6. They measured various practices in terms of helpfulness (covering compassionate body scan, breathing compassion in and out, mindful awareness, psychoeducation, discussion of challenges etc.), with an average rating of 3.6 out of 5 (not at all helpful to very helpful). Compliance was measured by self-reported minutes of home practice, which ranged from 55 to 2145 minutes (equating to 30 minutes practice six days out of seven). With regards to acceptability, Heriot-Maitland et al. [34] noted that the session with greatest attendance was the imagery session, and lowest were the psychoeducation and
mindfulness sessions. The majority of those who completed a session rated the material as ‘understandable’ (mean rating of 5.1 of 6), and the sessions as ‘very’ or ‘extremely’ helpful, with a mean score of 5 of 6. Although helpfulness ratings were highest for the compassion and imagery sessions these were not significant.

Kelly and Carter [17] found no statistical differences in perceived credibility and expectation of effectiveness of the self-compassion and behavioral self-help interventions. Self-reported compliance ratings between interventions did also not differ and were rated as ‘high’ overall. Those with PTSD in Au et al.’s [37] study rated individual CFT as ‘highly credible’ (with a mean of 7.3 out of 9) although 60% of their sample found the 6-session intervention ‘far too little’. Despite this, all components of the intervention were rated as at least ‘moderately helpful’ (with a mean of 3.6 out of 5).

4.0 Discussion

This review evaluates the effectiveness and acceptability of CFT as a psychological intervention for clinical populations. Since Leaviss and Uttley’s [12] previous review a further eight RCTs, two controlled trials and 11 observational trials were identified. This illustrates the growing interest in CFT across varying settings and populations. The RCTs indicate that CFT is more effective than no treatment or treatment as usual in EDs [18,25,16], depression [24,26], and psychosis [28]. Both Feliu-Soler et al. [19] and Kelly and Carter [17] found significantly greater reductions in psychopathology in their brief compassion interventions compared to other active treatments (mindfulness
and behavioral self-help), whereas Carlyle et al., [23] found brief group CFT fared equally to a relaxation group in reducing depression in those with OUD. These findings indicate that even brief and self-help compassion interventions show promise in complex clinical populations, who would typically receive support in secondary or tertiary care. Given the link between low self-compassion and increased psychopathology [10] it may be that even brief exposure to a CFT approach can directly reduce levels of psychopathology seen in these groups.

CFT was initially designed for shame-based difficulties [1] that are commonly found among those with complex mental health problems, which may explain the intervention’s popularity among psychologists as it enables a transdiagnostic approach. Indeed, the review found its application across an array of severe and complex mental health difficulties.

4.1 Acceptability
Leaviss and Uttley [12] stated that CFT was more acceptable among clinical populations than in non-clinical samples; the current review evaluates clinical populations only and found similar levels of acceptability in this sample.

Premature drop out of psychological therapy is a common occurrence, ranging from 30-60% attrition across populations, settings, and modalities [50]. This review found that attrition ranged from 0 to 52%, which appears somewhat lower than the average dropout and may link to the finding of an overall satisfaction with the approach.

4.2 Study quality
Overall the sample sizes lacked power to determine an effect and studies often showed a selection bias due to a lack of a control group and/or no
randomization. There was also a lack of consideration of implementation fidelity; information was lacking with regards to who delivered the therapy, what training they had received, to what extent they were supervised and by whom, and whether there was any measurement of delivering the intervention as intended. There was a lack of consensus as to what the primary outcomes of CFT were, which in part is due to the transdiagnostic nature of the therapy. However, identifying a primary outcome indicator would strengthen further research of CFT trials. Given the links between psychopathology and self-compassion [10] it would make sense that self-compassion is a core outcome measured in therapy and research (studies commonly use The Forms of Self-Criticising/Attacking and Self-Reassuring Scale [51]).

Even though nine RCTs were identified in the review, only three had sufficient power to detect an effect [18,25,26]; however, a further 16 studies did report effect sizes. There were also issues over bias (lack of single and double blinding), and external validity (specifically recruitment bias).

The observational studies were typically conducted in UK NHS sites with more representative populations not normally seen in RCTs. Although they are limited in their ability to directly infer effectiveness of the intervention, smaller case series and observational studies do allow researchers and clinicians to evaluate the process of therapy, and, for example, identify factors associated with ‘good’ and ‘bad’ outcomes [52]. RCTs are also unable to ascertain how a psychological therapy is effective and why this may be so, which, with a reasonably novel intervention as CFT, such an understanding is pertinent before larger-scale trials are funded.

4.3 Limitations
The review highlighted a lack of agreement as to what constitutes CFT, with studies ranging in duration, intensity, content and clinical involvement, resulting in a lack of parity across the comparisons. Various moderators (e.g. date of study publication, location/country of each study, clinically significant levels of distress) are difficult to account for during the analysis of our results and so we cannot be clear as to the impact they might ultimately have on our interpretations. No treatment manuals were published, limiting the replicability for researchers and clinicians alike. In addition, a lack of follow up data leaves unanswered questions with regards to maintained benefits and whether developing self-compassion requires time and practice. For example, Noorbala et al. [26] found non-significant reductions in depression and anxiety post-intervention, however significant reductions at follow up. In addition, Cuppage et al. [32] found large effect sizes for reductions in psychopathology following six months of group CFT, which were maintained at two-month follow up.

All but six studies delivered group CFT, making it difficult to draw firm conclusions on the usefulness and acceptability of individual CFT. The ‘common humanity’ [53,21] component of developing compassion suggests receiving CFT as part of a group could be more powerful than individual therapy, however this limits the capacity for individual meaning-making (i.e. clinical formulation) between therapist and client, and the tailoring to the individual’s needs. As psychological therapy is typically delivered on a one-to-one basis and recommended in this format [54], it is essential that individual CFT is evaluated.

As 24 of the 29 studies identified did not compare CFT to an alternative psychological therapy it is important to consider that the apparent effectiveness
may be attributable to a ‘psychological intervention’ rather than CFT per se. These CFT only intervention studies add valuable information to the field, especially with regards to early feasibility and clinical applicability, yet they provide limited information with regards to the isolated impact of CFT itself. In order for CFT to be considered for an evidence-based national guideline (i.e. NICE) further RCTs need to be funded in order to compare its effectiveness and acceptability against previously identified, evidence-based therapies.

The findings on low attrition, acceptable compliance and participant satisfaction with CFT must be considered in light of the recruitment process whereby participants were self-selected, and often only data of those who completed were included in the studies. It would be valuable to understand reasons why individuals decided not to engage in CFT, and for those that did start why they did not complete the intervention. This would enable clinicians and researchers alike to tailor CFT to the particular populations with whom they are working. This review did not include unpublished papers, and whilst this ensured a level of quality control it is important to acknowledge that publication bias may be influencing the collective findings and subsequent interpretation of the data.

4.4 Implications for research

There is a clear need for robust, fully powered RCTs. Future trials should ensure that CFT interventions comprehensively follow the core principles of the therapy’s underlying principles in order to appropriately assess its efficacy. Further research also needs to focus upon individual CFT sessions and the longer-term impact of the therapy. As CBT is the current treatment of choice for most psychological ailments due to its sizeable evidence-base [54] it is important that CFT is directly compared with CBT in terms of its effects.
Beaumont et al. [30] and Beaumont et al. [31] found that combined CBT and CFT led to significantly greater self-compassion and non-significant reduction in trauma symptoms compared to stand alone trauma-focused CBT. However, their samples were not randomized, and the studies’ quality ratings were both 50%. This suggests that CFT may be a useful adjunct to already well-established psychological therapies, although this would need to be tested with a randomized design before firm conclusions can be made.

Greater exploration into the acceptability of CFT is also warranted. The findings illustrate that those who agree to try CFT find it generally acceptable and helpful, but less is known around what might deter individuals from the therapy and lead to premature drop out for those who do begin. Such information would enable clinicians to tailor the intervention to fit the needs of the particular client group in question.

**4.5 Implications for practice**

Emerging evidence suggests that CFT has positive effects on individuals with a range of mental health problems, possibly as or more effective as other interventions. Not only does CFT appear to increase self-compassion, but it also seems to lead to a reduction of mental health symptomatology, even among difficult to treat populations such as forensic, EDs and personality disorder. The findings suggest that at least 12 hours of group CFT should be offered. Briefer interventions may result in some change however at present there is insufficient evidence to suggest that it would be clinically meaningful nor maintained. In more complex and severe populations, a higher dose may be warranted, but there is little evidence to suggest a greater impact when offering over 24 hours of CFT. Nevertheless, given the study quality identified and the
inconsistency in adherence to core CFT theory, it is only possible to acknowledge the likely clinical effectiveness of CFT.

4.6 Conclusions

CFT is increasing in popularity among psychologists as an alternative therapy for those who do not respond to or who decline CBT. This review found that CFT is likely to be more effective than no treatment in clinical populations and suggests that group CFT might be more effective than other psychological interventions. It shows promise in conditions with underlying shame and self-criticism, with encouraging results across severe and complex mental health problems. It is possible that brief CFT may reduce mental health symptoms and increase self-compassion, however there is some evidence that at least 12 hours is required for significant and longer-lasting change. Currently much more research needs to be conducted into individual CFT before a full evaluation of its evidence-based status can be determined. Before any firm conclusions on effectiveness can be made, there is a need for high quality RCTs across clinical populations.

5.0 Expert opinion

Our review demonstrates that CFT has positive effects on individuals suffering a range of mental health problems and is likely to be more effective than no psychological treatment and as, or possibly more effective than, other interventions. CFT increases self-compassion and also leads to reductions in mental health symptomatology, even among difficult to treat populations. Group CFT currently has significantly more evidence for its effectiveness than individual and self-help interventions. In terms of real-world implications, our findings therefore indicate that a moderate number of sessions (at least 12) are
likely required to reduce clinical symptoms, which will be important for funding bodies and commissioning groups to consider as they allocate healthcare resources in light of current evidence-based practice.

With the above in mind, further implications of our review are that CFT is feasible, well-tolerated by clients and can be offered as an adjunct or alternative to existing therapies. It was initially developed as a response to the transdiagnostic nature of human suffering, in the belief that cultivating a more ‘self and other’ focused compassionate mindset may be a universally helpful strategy across existing mental health disorder classification systems (e.g. DSM-5: APA, [55]; ICD-11: [56]). Recent work by Gilbert [57] speaks to this point in noting the fragmentation of processes and interventions that has plagued psychotherapeutic endeavors over time. To counter this problem Gilbert proposes an evolutionary framework for understanding our tendencies towards mental suffering and antisocial behavior, pointing to how such difficulties are choreographed in varying socio-developmental contexts. Gilbert calls for an integrative, evolutionary, contextual, biopsychosocial approach to psychology and psychotherapy, of which CFT is a current manifestation. As such, the potential future of the CFT approach could be to support a move away from traditional schools (or brands) of therapy, towards a more unified and holistic perspective. This is not to deride the utility of diagnoses, as they remain important in translating experience into a common language, but instead serves to offer a more comprehensive (and cross-cultural) lens through which to conceptualize common emotional distress/mental health issues.

CFT is demonstrably well accepted by clients and clinicians and there is now a clear need for an updated, universally deployed, standard manual to direct
future research. This is likely the current most important factor in the therapy’s implementation and further adoption into mainstream clinical practice.

Fortunately, such work is underway and first full clinical trial ready CFT manual is due to be published in early 2020. This will address the lack of standardization in current research we have identified as part of our review and pave the way for further randomized control trials aimed at reducing existing methodological limitations (e.g. the extent of variation in the way CFT is interpreted and delivered across populations and by clinicians).

We believe that the current trend for research across diverse populations can then continue apace, with novel methods for cultivating a compassionate mindset likely also emerging over time. These could, for example, involve further advances in virtual reality/immersive experiences [58] and/or more ecologically valid social experimentation [59], wherein changes in compassion behavior in real world settings are enacted following therapeutic interventions. Such developments could further the ongoing extension of compassion focused approaches to spheres outside of medicine and clinical behavioral science and we note that the CFT approach and underpinning evolutionary model are already being advocated in mainstream education [60] and business/organizational [61] arenas.

Given the substantial attention compassion has received as a core component of best practice in medicine [62] across healthcare systems, it is hoped that in 5 to 10 years from now, a greater consensus will be reached regarding the core elements of CFT as a psychotherapeutic approach. These might include compassionate attention and soothing rhythm breathing, generating compassionate thoughts and behavior and letter writing; with a focus on
prioritizing core methods above other less evidentially supported methods. In this way, a much clearer view of the key components of compassionate practices and their implications for improving mental health might then emerge and be the subject of a future review.

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Papers of special note have been highlighted as either of interest (*) or of considerable interest (**) to readers.


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Figure and table legends

Table 1. Studies of CFT in Clinical Populations. Ordered by methodological rigour (RCTs, controlled trains and observational design) and date

Figure 1. Flow diagram of study selection
Table 1. Studies of CFT in Clinical Populations. Ordered by methodological rigour (RCTs, controlled trials, and observational design) and date

<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>N</th>
<th>Population</th>
<th>Treatment</th>
<th>Outcome Measures</th>
<th>Main Outcomes</th>
<th>Study Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navab, Dehghani &amp; Salehi (2019) Iran</td>
<td>Randomized pilot study</td>
<td>N = 20</td>
<td>Mothers of children with ADHD with depression</td>
<td>Group CFT</td>
<td>Waitlist</td>
<td>Group 90 minute weekly sessions over 8 weeks DASS-21</td>
<td>50%</td>
</tr>
<tr>
<td>Carlyle et al, (2019)</td>
<td>Randomized feasibility trial</td>
<td>N=38</td>
<td>Opioid Use Disorder</td>
<td>Group CFT Group Relaxation Waitlist</td>
<td>Group</td>
<td>3 two-hour sessions over 3 weeks (intervention &amp; control group) OCDUS DASS FSCRS</td>
<td>59%</td>
</tr>
<tr>
<td>Kelly &amp; Waring (2018)</td>
<td>Randomized Feasibility Trial</td>
<td>N=40</td>
<td>Anorexia Nervosa (Non-treatment seeking)</td>
<td>Self-compassion letter writing</td>
<td>Waitlist</td>
<td>Self-help</td>
<td>One meeting with researcher followed by daily self-compassion letter writing</td>
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<tr>
<td>Study</td>
<td>Design</td>
<td>Setting</td>
<td>Sample Size</td>
<td>Intervention</td>
<td>Comparator</td>
<td>Primary Outcomes</td>
<td>Secondary Outcomes</td>
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<tr>
<td>Kelly et al., (2017)</td>
<td>Pilot Randomized Control Trial</td>
<td>Canada</td>
<td>N=22 Eating Disorders</td>
<td>Group CFT + TAU</td>
<td>TAU</td>
<td>90 min weekly sessions over 12 weeks</td>
<td>CFT is acceptable (80% retention) Group positively rated by ppts CFT + TAU had greater improvements in self-compassion,</td>
</tr>
<tr>
<td>Feliu-Soler et al., (2017) Spain</td>
<td>Randomised Pilot Trial</td>
<td>N=32</td>
<td>Borderline Personality Disorder</td>
<td>10 week mindfulness intervention</td>
<td>10 week mindfulness intervention</td>
<td>Group</td>
<td>Once a week (excluding mindfulness intervention received by both groups)</td>
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<tr>
<td>3 week ‘Loving-Kindness and Compassion Meditation intervention (based on CFT, MSC and Mindfulness)</td>
<td>3 week Mindfulness Continuation Training</td>
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<tr>
<td>Study</td>
<td>Design</td>
<td>Sample Size</td>
<td>Group Type</td>
<td>Intervention</td>
<td>Control</td>
<td>Measures</td>
<td>Findings</td>
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<tr>
<td>Kelly &amp; Carter (2015)</td>
<td>RCT</td>
<td>N=41</td>
<td>Binge eating disorder</td>
<td>Self-Compassion Self-help</td>
<td>Behavioural self-help Waitlist control</td>
<td>Self-help workbooks Introductory video PowerPoint *</td>
<td>Both interventions reduced mean weekly binge days Self-compassion reduced ED pathology and weight and eating concerns more than the behaviour and control condition 63%</td>
</tr>
<tr>
<td>Noorbala et al.</td>
<td>RCT</td>
<td>N=19</td>
<td>Depression</td>
<td>Group CMT</td>
<td>Waitlist</td>
<td>Group</td>
<td>12 two hour</td>
</tr>
<tr>
<td>Study Source</td>
<td>N</td>
<td>Treatment Group</td>
<td>Control Group</td>
<td>Sessions</td>
<td>LSCS Reductions</td>
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<td>Iran</td>
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<tr>
<td>Braehler, Gumley, et al., (2013)</td>
<td>N=40</td>
<td>Adults with psychosis (community and inpatient)</td>
<td>CFT + TAU Based on CFT for psychosis protocol</td>
<td>16 sessions (2 hours once a week) over 5 months</td>
<td>LSCS reductions in depression and anxiety at follow up</td>
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<tr>
<td>UK</td>
<td></td>
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<td>TAU: Community Psychiatric treatment (except 1 ppt) included psychotropic medication, contact with</td>
<td>Group</td>
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<tr>
<td>Cuppage et al., (2018) Ireland</td>
<td>Controlled Trial</td>
<td>N=87</td>
<td>Inpatients and outpatients with mental health difficulties associated with problematic shame and self-criticism</td>
<td>Group CFT</td>
<td>TAU</td>
<td>Group</td>
<td>14 3-hour sessions twice a week for 5 weeks then once a week for 4 weeks, then once a month for four months</td>
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<td></td>
<td>psychiatrist and/or CPN, OT, and day centre support</td>
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<td>depression Greater observed clinical improvement</td>
</tr>
</tbody>
</table>
Beaumont, Durkin, McAndrew & Martin (2016) UK  

Controlled Trial  

N=17 Fire service personnel with trauma symptoms  

Individual trauma focused CBT (TF-CBT) coupled with CFT  

TF-CBT  

Individual Up to 12 sessions  

First and last session 90 mins  

All other sessions 60 mins  

HADs, IES-R, SCS-SF  

TF-CBT + CFT was more effective in increasing self-compassion. Significant reductions in depression, anxiety, hyperarousal, intrusion and avoidance and significant increase in self-compassion seen in both groups  

All improvements maintained at 2-month follow up  

50%
<p>| Beaumont et al., (2012) UK | Controlled Trial | N=32 | Trauma | CBT + CMT | CBT | Individual | Up to 12 sessions over 12 weeks * | HADs, IES-R, SCS-SF | Significant reduction in depression, anxiety, avoidance, intrusions and hyper-arousal in both groups. Significant improvements in depression and avoidance in the CBT + CMT group. Significantly increased self-compassion in the CBT + CMT group. | 50% |</p>
<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>N</th>
<th>Group</th>
<th>Treatment</th>
<th>Frequency</th>
<th>Outcomes</th>
<th>Improvement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collins, Gilligan &amp; Poz (2018)</td>
<td>Observational</td>
<td>64</td>
<td>Dementia</td>
<td>Group CFT</td>
<td>6 weekly 2 hour sessions</td>
<td>HADS, respiratory rate, QOL-AD</td>
<td>Significant reduction in depression with a moderate effect</td>
<td>57%</td>
</tr>
<tr>
<td>McManus et al.</td>
<td>Observational</td>
<td>13</td>
<td>Patients</td>
<td>Group CFT</td>
<td>16 weekly</td>
<td>FSCRS, FSCS, OAS, SCS,</td>
<td>Significant reduction in respiratory rate with a large effect</td>
<td>31%</td>
</tr>
<tr>
<td>Reference</td>
<td>Design</td>
<td>N</td>
<td>Population</td>
<td>Intervention</td>
<td>Sessions</td>
<td>MHCS Changes</td>
<td>Feedback</td>
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<td>al (2018)</td>
<td>UK</td>
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<td>Open to a community mental health team</td>
<td>Two-hour sessions</td>
<td>MHCS changes were found on all measures</td>
<td>Positive feedback from attendees</td>
<td></td>
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</tr>
<tr>
<td>Rose, McIntyre &amp; Rimes (2018)</td>
<td>Observational</td>
<td>N=23</td>
<td>University students with significant impaired functioning and high self-criticism</td>
<td>Individual CFT</td>
<td>Six one-hour sessions approximately weekly</td>
<td>Feasible and acceptable</td>
<td>Statistically significant improvements for self-criticism, functional impairment, mood, self-esteem and maladaptive perfectionism with medium to large effect sizes</td>
<td>50%</td>
</tr>
<tr>
<td>Au et al., (2017)</td>
<td>Observational (multiple baseline design)</td>
<td>N=10</td>
<td>PTSD with elevated trauma-related shame</td>
<td>Individual CFT</td>
<td>None</td>
<td>Individual</td>
<td>6 weekly sessions lasting 60-90 minutes</td>
<td>PCL-5, ISS, SCS, PTCI-sb, CEQ</td>
</tr>
<tr>
<td>intervention</td>
<td>Observational</td>
<td>N</td>
<td>Learning Disability</td>
<td>Group CFT</td>
<td>None</td>
<td>Group</td>
<td>6 90 minute sessions</td>
<td>SCS-SF, PTOS-ID, ASCS</td>
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<td>Clapton, Williams, Griffith &amp; Jones (2017) UK</td>
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<tr>
<td></td>
<td>Observational</td>
<td>N=6</td>
<td>Learning Disability</td>
<td>Group CFT</td>
<td>None</td>
<td>Group</td>
<td>6 90 minute sessions</td>
<td>SCS-SF, PTOS-ID, ASCS</td>
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<tr>
<td>Williams et al</td>
<td>Observational</td>
<td>N=9</td>
<td>Bulimia</td>
<td>Individual CFT</td>
<td>None</td>
<td>Individual</td>
<td>Step 1: 5-7</td>
<td>EDE-Q</td>
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<tr>
<td>Study</td>
<td>Design</td>
<td>Country</td>
<td>Diagnosis</td>
<td>Treatment</td>
<td>Outcome</td>
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<tr>
<td>al., (2017)</td>
<td>Observational</td>
<td>UK</td>
<td>Depression</td>
<td>Group CBT with compassion training</td>
<td>Feasible and acceptable Depression symptoms reduced from moderate to minimal High effect size at 6-month follow up No significant reductions in eating disorder symptomatology Clinically reliable reductions in 7 of 9 participants</td>
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<tr>
<td>Asano et al., (2017)</td>
<td>Observational</td>
<td>Japan</td>
<td>Depression</td>
<td>Group CBT with compassion training</td>
<td>Feasible and acceptable Depression symptoms reduced from moderate to minimal High effect size at 6-month follow up No significant reductions in eating disorder symptomatology Clinically reliable reductions in 7 of 9 participants</td>
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<tr>
<td>Study Authors and Year</td>
<td>Study Design</td>
<td>Country</td>
<td>Sample Size</td>
<td>Group Details</td>
<td>Intervention Details</td>
<td>Outcomes</td>
<td>% Improvement</td>
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<tr>
<td>Graser et al., (2016)</td>
<td>Observational</td>
<td>Germany</td>
<td>N=11</td>
<td>Chronic depression Group Mindfulness and CFT</td>
<td>None</td>
<td>Group 12 weekly 100-minute sessions</td>
<td>HRSD, CIPS, PSR-CD, BDI-II, ASQ, RSQ-D, MAAS, SCS, CLS, RSES</td>
<td>Group was acceptable. Significant reduction in depression (medium effect post-treatment and large effect at 3-month follow up)</td>
</tr>
<tr>
<td>Bartels-Velthuis et al., (2016)</td>
<td>Observational</td>
<td>Netherlands</td>
<td>N=62</td>
<td>Psychiatric outpatients CFT Group</td>
<td>None</td>
<td>Group 9 2.5 hour sessions over 9 weeks</td>
<td>BDI-II, GAD-7, FFMQ, SCS</td>
<td>Significant reduction in depression increase in mindfulness (moderate effect sizes)</td>
</tr>
<tr>
<td>Study</td>
<td>Design</td>
<td>N</td>
<td>Condition</td>
<td>Intervention Details</td>
<td>Post-intervention Outcomes</td>
<td>Effect Size</td>
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<tr>
<td>Ashworth et al., (2015)</td>
<td>Observational</td>
<td>12</td>
<td>Acquired brain injury</td>
<td>CFT group (4 days) ≤18 sessions of individual CFT sessions alongside and following the group</td>
<td>Individual &amp; group sessions over 18 weeks</td>
<td>Large</td>
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<td></td>
<td>UK</td>
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<td>HADS, FSCRS</td>
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<tr>
<td>Gale et al., (2014)</td>
<td>Observational</td>
<td>139</td>
<td>Eating disorders</td>
<td>Two Step Treatment Programme 1. Psychoeducation</td>
<td>Group sessions over 4 weeks 2. 20 2.5-hour sessions over 4 weeks</td>
<td>66%</td>
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<td>UK</td>
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<td>EDE-Q, SEDS, CORE</td>
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</tbody>
</table>

Significant increase in self-compassion (large effect size)

Significant reductions in depression and anxiety post intervention and follow-up with large effect sizes

44%
<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Setting</th>
<th>Group Type</th>
<th>Control</th>
<th>Duration</th>
<th>Outcomes</th>
<th>Attrition</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heriot-Maitland et al., (2014)</td>
<td>Observational</td>
<td>UK</td>
<td>Acute inpatient</td>
<td>‘Open’ CFT group</td>
<td>None</td>
<td>16 weeks total of 20 weeks</td>
<td>‘recovered’ or ‘improved’</td>
<td>77%</td>
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<tr>
<td>Lucre</td>
<td>Observational</td>
<td></td>
<td>Personality</td>
<td>CFT group</td>
<td>None</td>
<td>16 weekly</td>
<td>SocialCS, SBS</td>
<td>34%</td>
</tr>
<tr>
<td>Study</td>
<td>Type</td>
<td>Sample Size</td>
<td>Setting</td>
<td>Intervention</td>
<td>Measures</td>
<td>Outcomes</td>
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<tr>
<td>Corten (2013) UK</td>
<td>Observational</td>
<td>N = 42</td>
<td>Patients open to a community mental health team</td>
<td>CFT Group</td>
<td>Sessions * OAS, FSCRS, DASS21, CORE</td>
<td>Reduction in depression, shame and self-hatred</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>None</td>
<td></td>
<td>Significant increase in self-reassurance</td>
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<td></td>
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<td>Significant reduction in risk to self and/or others</td>
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<td></td>
<td></td>
<td>At one year follow up CORE scores reduced to sub-clinical levels</td>
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<tr>
<td>Judge et al., (2012) UK</td>
<td>Observational</td>
<td>N = 42</td>
<td>Patients open to a community mental health team</td>
<td>CFT Group</td>
<td>Sessions 2 hour weekly sessions for 12-14 weeks</td>
<td>BDI, BAI, FSCRS, ISS, OAS, SocialCS, SBS, Weekly Diary Measuring Self-Reduction</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>None</td>
<td></td>
<td>Significant improvements in depression and anxiety</td>
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<td></td>
<td></td>
<td></td>
<td>Significant reductions in</td>
<td></td>
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<tr>
<td>Study</td>
<td>Design</td>
<td>N</td>
<td>Setting</td>
<td>Treatment</td>
<td>Group</td>
<td>Sessions</td>
<td>Measures</td>
<td>Results</td>
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<tr>
<td>Laithwaite et al. (2009)</td>
<td>Observational</td>
<td>19</td>
<td>Forensic, male, psychosis – maximum secure unit</td>
<td>CMT for psychosis</td>
<td>None</td>
<td>20 sessions over 10 weeks</td>
<td>Social CS, OAS, SCS, BDI-II, RSES, SIP-AD, PANSS</td>
<td>Significant improvements in depression, self-esteem, psychopathology, shame, and social comparison at post-treatment and follow-up</td>
</tr>
<tr>
<td>Gilbert &amp; Proctor (2006)</td>
<td>Observational</td>
<td>9</td>
<td>Severe, chronic, and complex mental health problems</td>
<td>Group CFT</td>
<td>None</td>
<td>12 two-hour sessions over 12 weeks</td>
<td>HADS, FSCS, FSCR, social comparison scale, diary measuring self-attacking and self-soothing,</td>
<td>Significant reduction in anxiety and depression</td>
</tr>
<tr>
<td>Study</td>
<td>Design</td>
<td>N</td>
<td>Participants</td>
<td>Intervention</td>
<td>OAS, SBS</td>
<td>Key</td>
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<tr>
<td>Gilbert &amp; Irons (2004)</td>
<td>Observational</td>
<td>8</td>
<td>Individuals from a self-help depression group who regarded themselves as self-critical</td>
<td>Group CFT</td>
<td>None</td>
<td>Group</td>
<td>4 1-hour sessions over 7 weeks (initial 3 week consecutive sessions and 4 week follow up)</td>
<td>HADs Diary and quantitative ratings of self-criticism and self-soothing</td>
</tr>
</tbody>
</table>

Key:

Bold type indicates new studies not included in the previous review

ACMTQ: Autonomous and Controlled Motivation for Treatment Questionnaire; ASCS: The Adapted Social Comparison Scale; ASQ: Affective Style Questionnaire; AS: Anxiety Scale; BDI: Beck Depression Inventory; BDI-II: Beck Depression Inventory-II; BAI: Beck Anxiety Inventory; BeliefsES: Beliefs about Emotion Scale; BES: Binge Eating Scale; BIAAQ: Body Image Acceptance and Action Questionnaire; BISS: Body Image Shame Scale; BMI: Body Mass Index; BSL-23: Borderline Symptom List-23; BSI: Brief Symptom Inventory; CEQ: Credibility/Expectancy Questionnaire; CES-D: Center for Epidemiological Studies
for Depression; CFT: Compassion focused therapy; CEAS: Compassion Engagement and Action Scales; CFQFC: Cognitive Fusion Questionnaire for Food Craving; CMT: Compassionate Mind Training; CORE: The Clinical Outcomes in Routine Evaluation; CGI-I: Clinical Global Impression Improvement Scale; CIPS: Collegium Internationale Psychiatriae Scalarum; CLS: Compassionate Love Scale; DASS: Depression and Anxiety Stress Scale; DASS21: Depression and Anxiety Stress Scale; DIB-R: Diagnostic Interview for Borderlines Revised; EDE: Eating Disorder Examination; EDE-Q: The Eating Disorder Examination questionnaire; ESS: Experiences of Shame Scale; FCS: Fears of Compassion Scales; FORSE: Fear of Recurrence Scale; FFMQ: Five Facet Mindfulness Questionnaire; FSCRS: Forms of Self-Criticism/Self-Attacking and Self-Reassuring Scale; FSCS: Function of Self-Criticising/Attacking Scale; GAD-7: Generalized Anxiety Disorder; GHQ: General Health Questionnaire; HINT: The Habitual Index of Negative Thinking; HRSD: Hamilton Rating Scale for Depression; HRS: Homework Rating Scale; HADS: Hospital Anxiety and Depression Scale; IES-R: Impact of Events Scale Revised; ISS: Internalized Shame Scale; LSCS: Levels of Self-Criticism Scale; MAAS: Mindful Attention and Awareness Scale; MHCS: Mental Health Confidence Scale; MDPS: Multi-Dimensional Perfectionism Scale; OAS: Other as Shamer Scale; OCDUS: Obsessive-Compulsive Drug Use Scale; PBIQ-R: Personal Beliefs about illness Questionnaire Revised; PANAS: The Positive and Negative Affect Scale; PANSS: The Positive and Negative Syndrome Scale; PCL-5: DSM 5 PTSD checklist; PHLMS: Philadelphia Mindfulness Scale; PHQ-9: Patient Health Questionnaire; PSR-CD: Psychiatric Status Ratings for Chronic Depression; PTCI-sb: self-blame subscale of posttraumatic cognitions inventory; PTOS-ID: The Psychological Therapy Outcome Scale for Intellectual Disabilities; QOL-AD: Quality of Life...
in Alzheimer's Disease; RR: Readiness Ruler; RSQ-D: Response Styles Questionnaire; RSES: Rosenberg Self-Esteem Scale; SBS: Submissive Behavior Scale; SCS: Self-Compassion Scale; SCRS: Self-Critical Rumination Scale; SCS-SF: Self-Compassion Scale Short Form; SIP-AD: The Self-Image Profile for Adults; SocialCS: Social Comparison Scale; SEDS: The Stirling Eating Disorder Scale; SSPS: The Social Safeness and Pleasure Scale; WASAS: Work and Social Adjustment Scale

* Session length not reported in original paper
Financial and Competing Interests Disclosure

The authors report no conflicts of interest
Figure 1. Flow Diagram of Study Selection

Papers identified and screened through database searches
(N=6801)

Additional paper identified through hand-search
(N=1)

Excluded at the title and abstract stage
(N=6677)

Full articles assessed for eligibility
(N=119)

Excluded (N=90)
- Not a CFT intervention (N=40)
- Non-empirical paper (N=10)
- Experimental design (N=4)
- Non-clinical population (N=10)
- Case series/N=1 (N=9)
- Text unavailable or not in English (N=12)
- Missed duplicate (N=5)

Studies included in the systematic review
(N=39)