Exploring change processes in compassion focused therapy in psychosis: Results of a feasibility randomized controlled trial

Christine Braehler[1,2]*, Andrew Gumley[1,2], Janice Harper[1], Sonia Wallace[1,2], John Norrie[3] and Paul Gilbert[4]

[1]NHS Ayrshire & Arran, UK
[2]University of Glasgow, UK
[3]University of Aberdeen, UK
[4]University of Derby, UK

Objectives. Compassion focused therapy (CFT) was developed to stimulate capacities for soothing and affiliation to self and others as a way to regulate the threat system. This feasibility study aimed to assess the safety, the acceptability, the potential benefits, and associated change processes of using group CFT with people recovering from psychosis.

Design. A prospective, randomized, open-label, blinded end point evaluation design was used.

Method. Forty adult patients with a schizophrenia-spectrum disorder were randomized to CFT plus treatment as usual (TAU; $n = 22$) or to TAU alone ($n = 18$). Group CFT comprised 16 sessions (2 hr each, 1 x week). Participants were assessed prior to randomization and at the end of treatment. Assessments included semi-structured interviews to elicit narratives of recovery from psychosis and self-report measures. At the end of treatment, participants were rated on the Clinical Global Impression Scale. Narratives were coded using the Narrative Recovery Style Scale to provide measures of change in compassion and avoidance. Change processes were correlated with changes in depression, personal beliefs about illness, fear of recurrence, and positive and negative affect.

Results. Group CFT was associated with no adverse events, low attrition (18%), and high acceptability. Relative to TAU, CFT was associated with greater observed clinical improvement ($p < 0.001$) and significant increases in compassion ($p = 0.015$) of large magnitude. Relative to TAU, increases in compassion in the CFT group were significantly

associated with reductions in depression ($p = 0.001$) and in perceived social marginalization ($p = 0.002$).

Discussion. Findings support the feasibility of group CFT in psychosis and suggest that changes in compassion can be achieved, which appear to reduce depression in particular. This is the first randomized controlled evaluation of CFT.

Conclusion. Compassion focused therapy appears as a safe, acceptable, promising, and evolving intervention for promoting emotional recovery from psychosis.

Practitioner Points

- Compassion focused therapy appears safe to use with people recovering from psychosis.
- Compassion focused therapy was associated with significantly greater clinical improvement than Treatment as Usual.
- Relative to TAU, CFT was associated with a significant increase in compassion of large magnitude.
- Relative to TAU, in the CFT group increases in compassion were significantly associated with reductions in depression and in perceived social marginalization.

The last 10 years have seen important developments in our understanding of the evolved function of different types of emotion (Panksepp, 1998). The threat system and its underlying neurophysiological systems are now well understood (LeDoux, 1998). What is less well recognized is that there are different types of positive emotions. Depue & Morrone-Strupinsky, (Depue & Morrone-Strupinsky, 2005) distinguished between affiliation and agency/sociability. Agency and sociability are linked to control, achievement-seeking, social dominance, and the threat-focused avoidance of rejection and isolation. In contrast, warm and affiliative interactions are linked to social connectedness and safeness as conferred by the presence and social support of others. Affiliative emotions are linked to the evolution of attachment (Mikulincer & Shaver, 2007), friendship, and alliance formation (Dunbar & Shultz, 2010). Early affiliative relationships play a powerful role in influencing the maturation of a range of neurophysiological processes – especially the frontal cortex (Cozolino, 2007) – and genetic expression (Belsky & Pluess, 2009). There is increasing evidence that affiliation regulates threat processing through feelings of social safeness (Depue & Morrone-Strupinsky, 2005; Kirsch *et al.*, 2005). Affiliative social relationships are calming, alter pain thresholds, and improve the immune system (Depue & Morrone-Strupinsky, 2005). The general functioning capacity to feel safe and affiliatively connected to one's social environment is a better predictor of psychopathology in the student population than positive or negative affect and perceived social support (Kelly, Zuroff, Leybman, & Gilbert, 2012). Attachment security and social safeness have profound effects on abilities to process social information, mentalize, and regulate affect (Fonagy, Gergely, Jurist, & Target, 2002).

There is considerable evidence that threat processing and regulation are problematic for people with psychosis. For example, threat emotions of fear, anxiety, and anger contribute to paranoid delusions and hallucinations (Freeman & Garety, 2003). During and following a psychotic episode, individuals experience a variety of internal and external threats. Internally, a person might feel unable to escape from distressing voices or unbearable emotions (Gilbert *et al.*, 2001). Intrusive traumatic memories, fear of relapse, and feelings of loss, shame, and stigma can add to increase the level of distress. Relapse and

being (re) traumatized by coercive service responses pose actual external threats (Frame & Morrison, 2001). Safety-seeking behaviours such as compliance with voices (Birchwood *et al.*, 2004; Birchwood, Meaden, Trower, Gilbert, & Plaistow, 2000; Hacker, Birchwood, Tudway, Meaden, & Amphlett, 2008), thought suppression (Fowler *et al.*, 2006; Spinhoven & van der Does, 1999), active social avoidance (Green & Phillips, 2004), and 'sealing over' (McGlashan, 1987) are common. Shame and stigma block affiliative connections to others, increase social anxiety (Birchwood *et al.*, 2007; Gilbert & Andrews, 1998) and entrapment (Birchwood *et al.*, 2000). Fears of being victimized, humiliated, stigmatized and excluded can also foster submission, social isolation, and alienation from oneself and others.

The dysfunctional regulation of threats, in particular of social threats, seems to be at the heart of the development and maintenance of psychosis. Heightened threat sensitivity has been linked to childhood adversity (Myin-Germeys & Os, 2007). Insecure and disorganized attachment styles (Berry, Barrowclough, & Wearden, 2008; Dozier, 1990; Tyrrell & Dozier, 1997) are common and might predispose individuals to difficulties in regulating threat (Liotti & Gumley, 2009). Liotti (Liotti, 2010) has drawn attention to children who cannot use the attachment system for soothing as they are fearful of the parent. The child experiences a conflict between approach (seeking comfort) and avoidance (fear of the parent) and subsequently enters a state of 'fear without resolution'. Importantly, this conflict is similar to shame in that we turn away from others, as we view them as a source of threat; yet it is social validation and acceptance that most typically relieves shame (Gilbert, 2010). This is typically captured in the sentiment 'if you get close to me you will discover things you won't like and then reject or hurt me'.

Compassion focused therapy (CFT) was developed specifically to build the capacities to experience compassion in high shame and self-critical individuals; those who are most likely to have difficulties regulating fear with the use of affiliative systems. There is now increasing evidence that compassion-based approaches are associated with positive outcomes (Barnard & Curry, 2011; Gilbert, 2010; Gilbert & Procter, 2006; Hofmann, Grossman, & Hinton, 2011), show preliminary effectiveness (Neff & Germer, in press), and can help people with psychosis (Johnson *et al.*, 2011; Laithwaite *et al.*, 2009; Mayhew & Gilbert, 2008). In fact, therapeutic improvements following Cognitive Behaviour Therapy (CBT) for psychosis seem to be mediated by neural changes in threat processing (Kumari *et al.*, 2011). Despite the obvious issue of threat processing and the lack of capacities for affiliative processing compassion studies in psychosis have been limited by a lack of control groups, randomization, and blindness.

A key aspect of CFT in psychosis involves helping individuals to develop a warm, caring, and attuned attitude towards difficult inner experiences. The development of a meaningful and coherent narrative of recovery has long been considered an important measure of coping in psychosis (Gumley, 2011; Lysaker, Lancaster, & Lysaker, 2003; McGlashan, 1987). Therefore, in this study, we sought to directly assess avoidance and compassion as reflected in the narratives of individuals talking about their experiences of recovery.

We aimed to assess the feasibility of randomization and acceptability of CFT (including the assessment of change processes) in a community setting using a parallel group design with blinded evaluation. In keeping with clinical trial guidance (MRC, 2006; NIHR, 2010), we formulated the parameters of this feasibility study around the PICO framework (Richardson, Wilson, Nishikawa, & Hayward, 1995):

1. Population: Can eligible participants be identified in the community and can they be recruited to participate in a trial of group CFT for emotional recovery from psychosis?
2. Intervention: Will group CFT be a safe and acceptable intervention for community patients diagnosed with psychosis?
3. Control group: Can an appropriate group of participants be recruited to allow a valid comparison with group CFT?
4. Outcomes: Can we identify signals suggesting that CFT is associated with increased compassion and reduced avoidance as reflected in individuals' narratives of their recovery? Do change processes correlate with changes in depression, positive and negative affect, negative beliefs about psychosis, and fear of recurrence? Can we identify a primary outcome measure for a future trial?

Method

Design

A prospective, randomized, open-label, blinded end point evaluation clinical trial was conducted to compare group CFT plus treatment as usual (TAU) with TAU alone. The active treatment phase consisted of group CFT delivered on a weekly basis for a total of 16 sessions. Participants were assessed at baseline prior to randomization and at the end of the group intervention by a research assistant blind to treatment allocation.

Participants

Participants were referred to the study by generic community mental health teams and local clinical psychology services of the National Health Service in Ayrshire & Arran, Scotland. They had to meet the following criteria: (1) primary diagnosis of a schizophrenia-spectrum disorder or bipolar disorder with psychotic features (ICD-10; WHO, 2010) based on case note review; (2) clinical stability defined by an ability to cope with residual psychotic symptoms; absence of alcohol or substance abuse; no risk to self or others; no significant intellectual impairment as determined by assessing psychologists; (3) basic ability to identify and describe emotions in relation to the psychosis and willingness to work on those in a group based on psychological interview; and (4) not in receipt of psychological interventions at the time of randomization to group. Coping ability was defined as having developed a personal coping strategy, which would at least in the short term provide some reduction in distress related to positive symptoms. Examples were listening to music to block out voices, challenging of paranoid beliefs, increasing medication, sleeping, exercising, speaking to community psychiatric nurse (CPN) or family member.

Measures

Compassion focused therapy change processes

Coding of Change Processes was made using the Narrative Recovery Style Scale (Gumley, Braehler, Laithwaite, MacBeth, and Gilbert, 2010b). Coding was based on a semi-structured Recovery Narrative Interview designed to stimulate a narrative around experiences of psychosis and recovery. Participants were initially asked broad, open-ended questions about their experiences of psychosis. This was intended to facilitate

dialogue, allowing discussion, and spontaneous reflection upon experiences. According to participants' responses, the interviewer gave prompts, with an increasing demand for reflectiveness and narrative production (a 'funnel structure'). The interview was structured around a framework of six core 'open' questions, with 'demand' prompts (e.g. 'What did you think about that'? or 'How did you feel at the time'?) where a participant did not reflect spontaneously. Flexibility was incorporated, allowing participants to 'shape' the interview through engagement, reflectiveness, and choice of topic. The interviewer used techniques of active listening, summarizing and reflecting back whilst avoiding introducing new material to the emerging narratives.

Verbatim transcripts were coded for the degree to which compassionate and avoidant *narrative strategies* were used. *Avoidance* is defined by the extent to which avoidance or minimization of negative experiences or the implications of negative aspects of experiences is a pervasive aspect of the narrative. It is associated with very little autobiographical or affectively coloured memories and closely corresponds to a threat-based social mentality (Tait, Birchwood, & Trower, 2003). Avoidance is scored on a 9-point scale anchored by 1 (Absent), 3 (Minimal), 5 (Moderate), 7 (Frequent), and 9 (Extreme Avoidance). This scale draws on McGlashan's concept of sealing-over (McGlashan, 1987) and on Gumley and Park's descriptions of a recovery narrative style characterized by 'defended independence' (Gumley & Park, 2010). *Compassion* is based on Gilbert's definition of compassion as a care-giving, affiliative mentality (Gilbert, 2000) and is operationalized in terms of a narrative strategy whereby painful aspects of the psychosis were related to warmth, acceptance, and understanding of self and others whilst relationships are valued as part of recovery (scored from −1 to 9). The 11-point Compassion scale is anchored by −1 (Anti-Compassionate), 1 (Lacking), 3 (Minimal but present), 5 (Emergent), 7 (Marked), and 9 (Exceptional Compassion).

The research assistant (SW) transcribed all interviews verbatim and anonymized transcripts. Interview transcripts were coded by SW who was blind to treatment allocation and checked by AG, who was unaware of the identity of the speaker. Inter-rater agreement on the two scales was calculated based on the two coders (AG, SW) allocating a score within 1 scale point of each other. Agreement was excellent for avoidance (92.6%) and compassion (100%).

Observer-rated outcomes

The Clinical Global Impression-Improvement Scale (CGI-I) is a widely used measure of improvement/exacerbation relative to baseline, which assigns a score on a 7-point scale ranging from 'very much worse' to 'very much improved' (Guy, 1976). CGI-I was rated by SW who was blind to the treatment allocation.

Correlates of change processes

We explored the validity of our measurement of change processes – the Narrative Recovery Style Scale (NRSS) – by exploring associations between avoidance and compassion with important clinical outcomes of depression, positive and negative affect, beliefs about psychosis, and fear of relapse.

The Beck Depression Inventory-II is a highly reliable and valid self-report measure of the severity of depressive symptoms (Beck, Steer, & Brown, 1996).

The Positive and Negative Affect Scale (PANAS) asked participants to rate to which extent they are experiencing 10 positive and 10 negative emotions (Watson, Clark, &

Tellegen, 1988). The positive affect words on PANAS relate to a positive affect system related to arousal and activation, which has been shown to be distinct from feelings of social safeness and contentment (Depue & Morrone-Strupinsky, 2005; Gilbert *et al.*, 2008).

The Fear of Recurrence Scale (FORSE) is a 23-item self-report inventory aiming to measure to what extent individuals with psychosis appraise their thinking and intrusions as threatening and indicative of relapse (Gumley & Schwannauer, 2006a). Higher total scores on FORSE are associated with greater positive symptoms, general psychopathology, and more negative illness beliefs (White & Gumley, 2009).

The Personal Beliefs about Illness Questionnaire-Revised (PBIQ-R) has been shown to reliably assess individuals' appraisals of their psychosis in terms of (1) loss, (2) social marginalization, (3) shame, (4) control over illness, and (5) entrapment (Birchwood, Mason, MacMillan, & Healy, 1993).

Arms of the study

Treatment as usual (TAU)

Treatment as usual was based in the community for all but one participant (who remained an inpatient) and could consist of psychotropic medication, contact with a psychiatrist and/or with a designated CPN, occupational therapy, and day centre support. TAU was free to vary post-randomization. None of the participants were receiving individual psychological therapy at the point of randomization into the trial, although this was free to vary post-randomization. Thirty-four participants (85%) received antipsychotic medication; often in combination with either antidepressant or anxiolytic or mood-stabilizing medication. Three participants received antidepressants only, two mood stabilizers only. One person did not receive any medication.

Group compassion focused therapy (CFT)

All participants in the CFT arm also received TAU, which was free to vary. The group CFT for psychosis protocol (Braehler, Harper, & Gilbert, in press) was developed by the first author for use in the community. It is based on a forensic group manual (Laithwaite *et al.*, 2009), generic CFT (Gilbert, 2010), and integrates aspects of mindfulness (Nairn, 1999; Segal, Williams, & Teasdale, 2002) and group processes in psychosis (Kanas, 1996). The 16 sessions were divided into three phases. In the formation phase (1–5), members explored the impact the psychosis had on their lives and formulated blocks to recovery in terms of the evolutionary CFT model. The insights inherent in the model aim to reduce shame, stigma, and self-blame and activate the motivation to build compassionate skills. The middle phase (6–13) focused on the gradual development of compassion by exploring the nature of compassion and how that might be expressed in the group and used for oneself. Compassion skills such as mindfulness, appreciation, imagery, attention, behaviour, and reframing were practiced and applied in relation to the internal and external threats and related difficulties members brought up (e.g. shame, vulnerability, stigma, social anxiety, paranoia, self-attacking, hostile voices, poor motivation, anhedonia). During the ending phase (14–16), expressive writing tasks were used to help members reflect on and integrate changes in their recovery from a compassionate stance. Throughout all the sessions, the group process was capitalized on to foster a care-giving mentality by developing a compassionate group mind,

encouraging supportive interactions, and building capacity to relate to peers. Members were encouraged to practice compassionate skills between sessions.

Procedure

Local ethics and health board management committees approved the study. Psychologists assessed potential participants for eligibility by conducting clinical assessments focusing in particular on the impact the person perceived the psychosis to have had on their emotional and interpersonal functioning, attempts to cope with these impacts and any unintended consequences (Gumley, Braehler, Laithwaite, MacBeth, & Gilbert, 2010a). Suitable and interested participants gave informed consent.

Recruitment, randomization, and running of groups in the three localities were staggered. When a block of at least 12 participants had been recruited in one locality, independent randomization was conducted by AG using a web-based computer-generated permuted procedure (http://www.randomization.com). The first two groups were randomized at a ratio of 1:1 to CFT + TAU or TAU alone; the third block was randomized at a ratio of 2:1 in favour of the group to ensure a CFT group size of at least seven members. The 16-session intervention was completed within 4–5 months. A research assistant (SW) conducted assessments prior to randomization (self-report measures, Recovery Narrative Interview) and following completion of the group or respective wait (self-report measures, Recovery Narrative Interview, Clinical Global Impression Scale). The research assistant was masked to the allocation of participants. Further efforts to maintain the mask included locating the assessor in a building separate from clinical staff and advising participants not do disclose allocation in the follow-up interview. No formal evaluation of the masking was undertaken.

Each group was delivered by two psychologists with experience of using psychological therapy for psychosis. All five trial therapists (two consultant, three specialist psychologists) had attended a 3-day workshop on attachment and interpersonal processes in psychosis (Gumley & Schwannauer, 2006b). Four of the five had also previously attended a 3-day workshop in CFT (www.compassionatemind.co.uk). The group intervention was delivered over 16 sessions (weekly 2 hr) offered over a 4- to 5-months period. Trial therapists met for group peer supervision every 2 weeks with regular consultation with the founder of CFT. All therapists received individual fortnightly supervision with the two consultants acting as supervisors to the other three psychologists.

Data analyses

The aim of this feasibility study was to detect the patterns of results signalling the key mechanisms of change in compassion and avoidance and their associations with important clinical outcomes relevant to CFT. The study was not intended as a definitive evaluation of CFT, so it was not adequately powered *a priori*.

Data were analysed using SPSS 17 (SPSS Inc, 2007). Normality of outcome scores was checked using Kolmogorov–Smirnov tests. In the CFT condition, post-assessment data were missing for five participants on self-report and for a further two on the interview. One TAU participant had failed to fully complete PBIQ and BDI and refused the interview at post-assessment. All data available for this participant were included in the analyses. Data for Clinical Global Improvement Scale and NRSS were not normally distributed.

Non-parametric tests were used to test for between-group (Mann–Whitney *U*) and within-group differences (Wilcoxon Signed-Rank) on NRSS. Non-parametric correlations (Spearman's Rho) between change scores of NRSS and change scores of self-report measures were calculated. Fisher *r*-to-*Z* transformations were calculated to test for between-group differences in the strengths of these correlations. Non-parametric Mann–Whitney *U*-tests were used to test for between-group differences in the degrees of clinical global improvement.

Results

Recruitment to trial

Figure 1 illustrates the flow of participants into and through the study. Of the 123 participants referred, 47 (38%) either failed to attend the assessment or were not interested, 36 (29%) did not meet the study criteria, and 40 (32%) met the study criteria following psychological assessment. Forty participants were randomized to CFT (*n* = 22) and to TAU (*n* = 18). Table 1 summarizes the baseline demographic and clinical characteristics of participants. The 29% who were found to be unsuitable failed to meet entry criteria for either clinical stability and/or basic ability to identify and describe emotions in relation to psychosis. In those cases, the clinical stability criterion was not met due to severe level of preoccupation with and distress resulting from positive symptoms or severe disorganized thinking. The criterion for basic emotional understanding was not met when patients were unwilling or unable to consider emotional aspects of the psychosis either because they lacked insight or maintained a purely biological view of their difficulties.
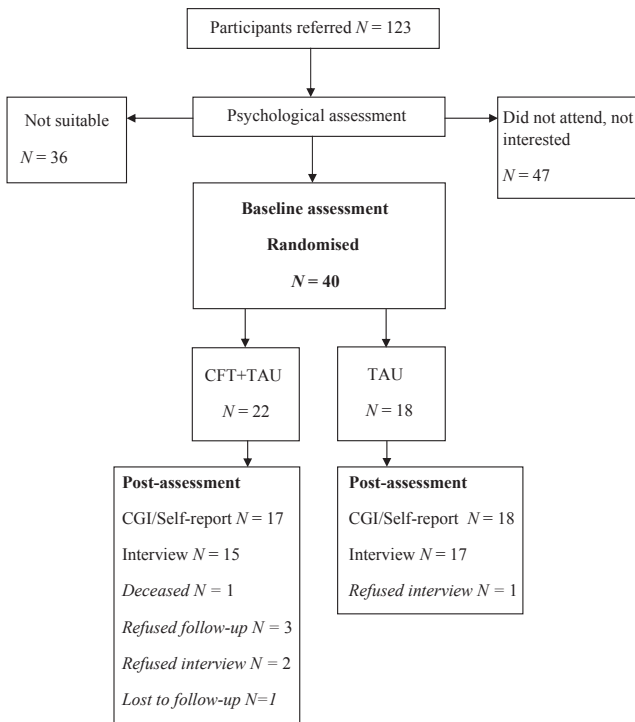

Figure 1. Flow of participants through the study.

Table 1. Demographic and clinical characteristics at baseline

	Group, n = 22 (100%)	TAU, n = 18 (100%)
Age, years, mean (SD)	43.2 (12.5)	40.0 (7.5)
Gender, n (%)		
Male	13 (60%)	9 (50%)
Female	9 (40%)	9 (50%)
Marital status, n (%)		
Single	14 (63%)	13 (72%)
In relationship	8 (37%)	5 (28%)
Ethnicity		
White British/Scottish	22 (100%)	18 (100%)
Diagnostic criteria		
Schizophrenia	9 (41%)	3 (16%)
Other non-affective psychosis	6 (27%)	4 (22%)
Schizoaffective disorder	1 (5%)	4 (22%)
Depressive psychosis	4 (17%)	5 (28%)
Bipolar disorder with psychosis	1 (5%)	1 (6%)
Delusional disorder	1 (5%)	1 (6%)
Duration of illness, years (mean [SD])	11.3 (5.9)	9.4 (6.9)
Age at onset, years (mean [SD])	31.9 (12.1)	30.6 (7.9)
BDI (mean [SD])	14.4 (9.1)	21.6 (9.0)
PANAS Negative affect (mean [SD])	19.2 (7.6)	23.7 (8.7)
PANAS Positive affect (mean [SD])	25.1 (9.0)	25.9 (11.1)
PBIQ Total (mean [SD])	67.9 (14.6)	73.4 (9.8)
PBIQ Loss	16.9 (4.5)	17.6 (2.9)
PBIQ Entrapment	14.9 (3.7)	16.6 (2.8)
PBIQ Shame	14 (3.8)	14.6 (3.1)
PBIQ Lack of control	12.0 (2.9)	13.2 (2.7)
PBIQ Social marginalization	10.2 (2.3)	11.4 (1.9)
FORSE Total (mean [SD])	23.2 (11.9)	28.7 (17)
FORSE Awareness	10.4 (5.7)	11.2 (6.7)
FORSE Intrusiveness	6.2 (4.9)	8.5 (6.5)
FORSE Fear of relapse	6.6 (4.6)	9.0 (5.8)

Acceptability

Attrition from CFT was 18% (4 of 22). The four CFT participants, who were unwilling or unable to complete post-assessments, had all dropped out of the therapy within the first four sessions. One TAU participant and three CFT participants refused the recording of the interview at post-assessment due to feelings of paranoia. The 18 completers attended for an average of 12 sessions ($SD = 3.6$). One person in the CFT condition died of natural causes as determined by post-mortem examinations. There were no suspected unexpected serious adverse reactions over the course of the trial.

Comparisons of change in Narrative Recovery Style Scales between CFT and TAU groups

Table 2 lists median scores and interquartile ranges for compassion and avoidance at baseline and end of treatment for both groups. CFT and TAU had comparable levels of compassion ($U = 111$, $Z = -1.19$, $p = 0.24$, $r = -0.20$) and avoidance ($U = 130.5$,

Table 2. Median, Interquartile ranges (IQR), and within-group effect sizes of Narrative Recovery Style Scales

	Baseline		End of treatment				ES
	Median	IQR	Median	IQR	Wilcoxon Signed-Rank Z	Sig.	r
CFT (n = 15)							
Avoidance	2.5	1.5–3.5	2.0	1.0–3.0	−1.63	0.10	−0.41
Compassion	3.0	1.9–4.1	4.0	3.0–5.0	−2.36	0.02	−0.59
TAU (n = 17)							
Avoidance	3.0	0.9–5.1	2.5	0.9–4.1	−1.28	0.20	−0.30
Compassion	2.0	0.0–4.0	2.5	1.0–4.0	−1.23	0.22	−0.29

$Z = -0.48, p = 0.62, r = -0.08$) at baseline. Compassion was categorized as 'Minimal but Present' (Md = 3). Levels of avoidance were 'Minimal' (Md = 3).

However, when end of treatment scores were compared, CFT participants showed significantly more compassion in their narratives compared with TAU participants ($U = 75, Z = -2.43, p = 0.015, r = -0.42$). CFT participants scored 4 for compassion at follow-up, thereby moving towards the next level of 'Emergent Compassion' (Score of 5). Comparisons within CFT participants showed that there was a reduction of moderate magnitude in avoidance ($r = 0.41$) and an increase in compassion of large magnitude ($r = 0.59$) with the latter reaching statistical significance ($Z = -2.36, p = 0.02$) compared to non-significant small effects in TAU.

Validity of the Narrative Recovery Style Scale

We wished to explore the validity of the NRSS by exploring associations with important clinical outcomes. This would also assist us to identify patterns of correlations signalling potential outcomes for a future pilot randomized controlled trial (MRC, 2006). Table 3 shows correlations between mean change scores of self-report measures of emotional recovery and median change scores of NRSS scales according to group. In the CFT group, an increase in compassion was significantly associated with a decrease in BDI depression ($r = -0.77; p = 0.001$), PBIQ entrapment ($r = -0.56; p = 0.031$), PBIQ shame ($r = -0.57; p = 0.027$), PBIQ social marginalization ($r = -0.74; p = 0.002$), FORSE intrusiveness ($r = -0.58; p = 0.022$), and FORSE fear of relapse ($r = -0.52; p = 0.045$). Amongst CFT participants, there was a significant association between a reduction in avoidance and a reduction in the PBIQ lack of control over illness ($r = -0.57; p = 0.027$). In contrast, the only significant association in the TAU group was between a reduction in avoidance and an increase in PANAS negative affect ($r = -0.47; p = 0.049$). On further testing, the correlations between compassion change – BDI change and compassion change – PBIQ social marginalization change in the CFT group were significantly greater than those in the TAU group (see Table 3).

Comparisons of clinical global improvement between CFT and TAU groups

Groups differed significantly in terms of ratings on the Clinical Global Improvement Scale at post-assessment. CFT participants (Md = 3 [minimal improvement], IQR 2.5–3.5) showed significantly more improvement and less exacerbation at follow-up than

Table 3. Group differences in Pearson's correlations between Narrative Recovery Style Scales and self-report measures

	CFT (*n* = 15)	TAU (*n* = 17)		
	r	*r*	*Z*	*p*
Compassion median change				
BDI mean change	−0.78**	−0.16	−2.22	0.03*
PANAS Neg mean change	−0.37	0.28	−1.73	0.08
PANAS Pos mean change	0.19	0.12	0.18	0.85
PBIQ Total mean change	−0.71**	−0.27	−1.57	0.12
PBIQ Loss mean change	−0.17	−0.17	0	1
PBIQ Entrapment mean change	−0.56*	−0.32	−0.77	0.44
PBIQ Shame mean change	−0.57*	−0.36	−0.67	0.50
PBIQ Lack of control mean change	−0.46	−0.39	−0.21	0.80
PBIQ Social marginalization mean change	−0.74**	−0.15	−2.01	0.04*
FORSE Total mean change	−0.41	0.04	−1.57	0.12
FORSE Awareness mean change	0.32	0.10	0.60	0.54
FORSE Intrusiveness mean change	−0.58*	−0.06	−1.54	0.12
FORSE Fear of relapse mean change	−0.52*	−0.01	−1.44	0.15
Avoidance median change				
BDI mean change	0.26	−0.02	0.71	0.47
PANAS Neg mean change	−0.20	−0.47*	0.78	0.43
PANAS Pos mean change	−0.24	0.05	0.50	0.61
PBIQ Total mean change	0.44	0.04	1.11	0.27
PBIQ Loss mean change	0.06	−0.25	0.81	0.42
PBIQ Entrapment mean change	0.38	0.11	0.74	0.45
PBIQ Shame mean change	0.37	0.07	0.81	0.42
PBIQ Lack of control mean change	0.53*	0.11	1.21	0.23
PBIQ Social marginalization mean change	0.32	0.11	0.56	0.57
FORSE Total mean change	0.26	−0.14	1.0	0.29
FORSE Awareness mean change	−0.08	−0.12	0.11	0.91
FORSE Intrusiveness mean change	0.23	−0.14	0.23	0.81
FORSE Fear of relapse mean change	0.31	−0.19	1.31	0.19

Note. *Pearson's correlation significant at 0.05 level; **Pearson's correlation significant at 0.01 level.

participants in TAU (Md = 5 [minimal exacerbation]; IQR 4–6; $U = 34.5$; $Z = −4.04$; $p < 0.001$, $r = −0.68$). One CFT participant was rated as 'much worse' since he appeared very preoccupied with the stigma of having a mental health problem.

Discussion

This feasibility study of group CFT is to our knowledge the first randomized controlled evaluation of CFT. Referral pathways to identify suitable participants could be successfully established in a NHS community setting. Suitable participants were reasonably clinically stable and were open to developing a psychological understanding of their illness. The latter suitability criterion has been associated with a greater up-take of effective CBT, irrespective of severity of symptoms (Freeman *et al.*, 2012). The low attrition rate (18%), the reasonable attendance rate (82% attending more than four sessions; mean sessions

attended = 12), and the absence of serious adverse effects suggest that CFT is safe and acceptable to use with this population. A significantly greater proportion of CFT participants (65%) were rated as having improved compared to TAU (5%). One CFT participant (5%) showed increased preoccupation with the stigma of having a mental health problem at post-assessment, for which he was offered individual support. The analysis of narratives revealed a significant increase of large magnitude in compassion (0.59) at the end of treatment in the way CFT participants talked about their psychosis and their recovery compared to a non-significant increase of small magnitude in TAU (0.29). These increases in compassion were significantly correlated with reductions in depression, negative beliefs about psychosis, and fear of relapse in the CFT group. The CFT group showed the strongest associations between an increase in compassion and a reduction in depression and social marginalization of moderate magnitude. These associations were significantly greater than the respective correlations in the TAU group. These findings highlight the important mechanisms of change linked to CFT. This could be viewed as initial evidence that the development of affiliation to self and others reduces clients' sense of exclusion and inferiority/shame due to their illness and related depressed affect.

This study suffered from several methodological shortcomings. TAU in the community as a control condition was difficult to regulate as a reorganization of community mental health services took place during the study period. As a result, TAU showed great variability both between and within groups. Furthermore, psychiatric diagnosis was based on case note review not on a diagnostic interview. No formal checks of treatment fidelity, therapist competence, and maintenance of blinding were conducted. No follow-up assessments were conducted. Whilst the sample size was appropriate for our goal of identifying important signals of change associated with CFT, it did not permit us to investigate possible clustering effects of groups. A further methodological problem was an apparent imbalance between the two groups in terms of levels of depression prior to randomization. The TAU group had significantly higher levels of depression. This was an important problem given the importance of depression as an outcome of CFT. However, we showed that changes in depression were correlated with changes in compassion in the CFT group, but not the TAU group and that the difference between correlations was statistically significant.

Despite its limitations, the study had various strengths. We utilized a therapy (CFT) which draws on a theory of affect regulation with an empirical base in neuroscience and evolutionary psychology (Gilbert, 2000, 2010). This was the first randomized controlled trial of CFT. Representation of men and women was balanced. None of the participants received any other formal psychological intervention during the study period. We employed narrative-based measures, which capture change processes in psychotherapy.

Our experiences of group CFT and our findings on acceptability reinforce the value of group CFT in this population. Group CFT provided a context for individuals to feel connected with others and develop a sense of common humanity as participants shared experiences of psychosis. Many participants fed back informally that they valued the group, but that it was too short and that they could have benefited from further skills practice. Our findings regarding the association between increased compassion and reduced sense of social marginalization in the CFT group signal support for the use of group CFT. However, some individuals struggled to express compassion because they feared that compassion would expose weakness and make them vulnerable (Gilbert, McEwan, Matos, & Rivis, 2011; Longe *et al.*, 2010; Rockliff, Gilbert, McEwan, Lightman, & Glover, 2008). Therefore, in future trials we would focus more on these fears, include

more sessions, and possibly add individualized CFT especially in the context of early life abuse or trauma.

Given that (a) CFT was understood, accepted, and valued by participants (b) was associated with increased compassion, (c) which was strongly associated with reduced depression in the CFT group, but not the TAU group, further research on the value of CFT in the context of recovery from psychosis is warranted. Although our findings point towards depression as a key outcome, we did not specifically focus on other key experiences such as distressing voices or paranoia. Future feasibility studies of CFT should also consider these outcomes. On the basis of our findings, we propose that a larger trial could be powered on depression severity as a primary outcome.

Conclusions

This feasibility study is the first randomized controlled evaluation of CFT. Our findings suggest that the clients with emotional dysfunction following psychosis could success-fully be recruited to the study. We found that clients with psychosis like, understand, and derive benefit from CFT whilst recognizing that they require longer term support in cultivating and using their 'compassionate minds'. A Treatment as Usual control group could be recruited to the trial although 'standard care' in the community was subject to variations. Finally, the assessment of compassion, as reflected in the narrative, provides a means of assessing mechanisms of change in CFT. Further work is underway to assess narratives for other mechanisms of affect regulation such as mentalization. Group CFT appears as a safe, acceptable, promising, and evolving intervention for promoting emotional recovery from psychosis.

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