THE UNIVERSITY OF HULL

An Exploration of Agents of Change and Effectiveness in Compassion Orientated Group Interventions

Being a thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology in the University of Hull

By

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Overview

This portfolio thesis is comprised of three parts: 1) a systematic literature review, 2) an empirical report and, 3) supporting appendices.

Part one is a systematic literature review which aimed to explore the effectiveness of compassion-based group interventions. A systematic search of three key databases identified 13 empirical papers for review. A meta-analysis of ten of these papers was conducted to explore the effectiveness of the compassion-based group interventions administered in these studies. Four meta-analyses were conducted with regards to the following outcomes; anxiety, depression, self-compassion, self-criticism. A narrative synthesis of the evidence for the effectiveness of compassion-based group interventions provided by the three remaining papers is also included in the review. A review of methodological quality and standard of reporting of the reviewed studies is provided. Implications for research and clinical practice are discussed.

Part two is an empirical report of an original piece of research aiming to identify the agents of change within a compassionate mind training group for staff. This is a feasibility study which pilots the reported methodology and evaluates its suitability for identifying agents of change. Quantitative analysis aimed to investigate both the effectiveness of the compassionate mind training group and the agents of change within the training. Qualitative analysis was used to explore participants' experiences of the group and any changes they had observed. The findings of the study are reported and the clinical implications are discussed.

Part three contains the appendices relating to the systematic literature review and the empirical report. In addition there is a reflective statement focused on the research process, followed by an epistemological statement.

Overall word count (excluding appendices): 18, 270

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discussions)

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Part One

Systematic Literature Review

Effectiveness of Compassion-Based Group Interventions: A Meta-Analysis and Narrative Synthesis

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Please see Appendix C for the Author Guidelines.

Word count (including tables/figures, excluding abstract and references): 5169

Abstract

Purpose. The field of compassion-based psychotherapeutic intervention is growing rapidly as an increasing number of compassion-based models are being administered within a group setting. The aim of this systematic review was to bring together the available research evidence on the effectiveness of compassion-based group interventions (CBGI), and to provide recommendations for future research within this field.

Methods. A comprehensive systematic review of the literature was conducted to identify literature relating to the effectiveness of CBGI. Thirteen studies were identified that met the inclusion criteria for the current review. A meta-analysis was conducted on ten of these studies, and a narrative synthesis was applied to the data of the three remaining studies.

Results. Significant improvements were found for levels of anxiety and depression. Both self-compassion and self-criticism were approaching significance in the direction of improvement. Variation in study quality and robustness was found.

Conclusions. CBGI show promise as an effective method of improving symptomology and well-being amongst clinical and non-clinical populations. However, more high quality trials are needed before conclusions can be made regarding the effectiveness of CBGI on self-compassion and self-criticism outcomes.

Introduction

Understanding Compassion and its Importance

Despite the increasing popularity of compassion-based approaches, researchers and clinicians use a variety of constructs to attempt to define the concept of compassion (Strauss et al, 2016). Gilbert (2014) refers to compassion as "the sensitivity to suffering in the self and others, with a commitment to try to alleviate and prevent it", a definition which influenced the development of Compassion Focused Therapy and Compassionate-Mind Training. Alternative views define compassion as an emotion (Goetz et al, 2010), referred to as "the feeling that arises in witnessing another's suffering". Other researchers have focused more specifically on the concept of self-compassion (Neff, 2003), separating self-compassion into three components: being mindful, connecting with others and self-kindness. The Mindful Self-Compassion programme (Neff & Germer, 2013) utilises this definition of self-compassion within the intervention. There are also multiple compassion-based group therapies that incorporate elements of Buddhist ideology within the intervention (Gilbert, 2010; Neff, 2013; Jazaieri et al, 2013; Hoffman, Grossman & Hinton, 2011). In recent years, compassionate interventions have been found to be effective for a range of clinical and non-clinical populations (Gale, Gilbert, Read & Goss, 2014; Ashworth, Clarke, Jones, Jennings, & Longworth, 2015; Shapira & Mongrain, 2010).

There is an increasing amount of evidence to support the benefits of self-compassion and compassion for others on mental health and wellbeing. Research suggests that higher levels of compassion are linked to psychological wellbeing (Neff & Germer, 2017) as well as quality of life (Beaumont, Durkin, Martin & Carson, 2016; Van Dam, Sheppard, Forsyth, & Earleywine, 2011). There is further evidence that indicates that there is a relationship between higher levels of compassion for others and resilience to stress (Cosley, McCoy, Saslow & Epel, 2010). In relation to self-compassion, research suggests that it can improve relationships with others (Leary et al., 2007) as well as increasing personal initiative and optimism (Neff, Kirkpatrick & Rude, 2007). The extensive benefits of compassion reported in the literature are supported by a meta-analysis conducted by MacBeth and Gumley (2012) which reports higher levels of self-compassion are associated with fewer mental health difficulties, whereas low self-compassion is linked to higher prevalence of psychopathology.

Group Interventions

Due to an increasing demand for mental health support, services are often stretched with long waiting lists (Godden & Pollock, 2009). Indeed, service users' biggest complaint is in regard to the lack of psychological therapy that is available within services (Kinderman, 2014). As a result, more emphasis is being placed on the importance of increasing access to time-efficient, psychological therapy (Steenbarger & Budman, 1996). Group therapy has been found to be effective for a wide range of populations, and evidence suggests that group interventions play an essential role in managing service delivery demands in healthcare settings (Buddman, 1992; MacKenzie, 1994). Furthermore, some studies indicate that group therapy can be more efficient than its individual counterparts (Bednar & Kaul, 1994; Tillitski, 1990).

These findings suggest that there may be added benefits to offering service users group interventions over individual therapy. Indeed, research evidences a number of benefits associated with group therapy that are not accessible when working individually with service users, including vicarious learning, role flexibility (client as both help seeker and help provider), and universality (group member's realisation that other members are struggling with similar problems) (Ogrodniczuk & Piper, 2003; Fuhriman & Burlingame, 1990). Furthermore, delivering interventions in a group format may be of particular benefit in compassion-based work as the group setting offers service users the opportunity for experiential exercises of both offering and receiving compassion from others in a safe environment.

Compassion-Based Group Interventions

The literature suggests there are at least five compassion-based interventions that have been delivered in a group format: Compassionate Mind Training (CMT; Gilbert, 2014), Mindful Self-Compassion (MSC; Neff & Germer, 2013), Compassion Cultivation Training (CCT; Jazaieri et al., 2013), Compassion and Loving-Kindness Meditation (LK-M; Hoffman, Grossman & Hinton, 2011) and Cognitively Based Compassion Training (CBCT; Pace et al, 2009). Three of these met the criteria for the current review; CMT, MSC and CCT. As interventions that are solely meditation-based were discounted from the current review, LK-M was not included. Similarly, studies that included other psychotherapeutic interventions alongside compassion were not reviewed and therefore CBCT was excluded from this review.

Compassionate Mind Training

CMT was adapted from Compassion Focused Therapy (CFT) for delivery in a group setting. With theoretical underpinnings of evolutionary, Buddhist and attachment psychology, CMT is often used for individuals with complex and enduring mental health conditions, in particular those with high levels of shame and self-criticism. Both CFT and CMT place emphasis on the importance of psychoeducation, cultivating compassionate capacities and addressing fears and resistances to compassion.

Mindful Self-Compassion

Similarly to CFT, MSC has roots in Buddhist and applied psychology as well as incorporating positive psychology traits. Designed as a hybrid programme, MSC is appropriate for both clinical and non-clinical populations. There is a focus on developing mindfulness skills, alongside building self-compassion.

Compassion Cultivation Training

With specific links to Tibetan Buddhism CCT was also developed for use in clinical populations and the general public. In CCT loving-kindness and compassion meditation is used to increase compassion for the self and others, alongside compassion cultivation practices (e.g. compassionate imagery).

Rationale for the review

Aims of the review

This review investigates the effectiveness of the relatively novel intervention of compassion-based therapy groups. There is an increasing amount of evidence to support the use of individual compassion-based interventions when working with clients across a range of populations and with a variety of presentations (Kirby, 2017), but no review has yet been conducted specifically to investigate the efficacy of compassion-based group interventions (CBGI).

A review conducted by Leaviss and Uttley (2015) into the psychotherapeutic benefits of compassion-focused therapy (CFT) included several group interventions, indicating that the prevalence of compassion-based therapy groups was increasing in clinical practice. This review searched literature up to April 2012, and since then a number of further studies have evaluated the effectiveness of CBGI. This development in clinical practice suggests the need for a review of the current research in this area to determine whether

the available evidence supports the use of CBGI in evidence-based practice (Spring & Neville, 2011).

The current review aimed to evaluate the effectiveness of CBGI for a range of populations, and to make recommendations for future research in this area. It aimed to provide a more focused and recent review of the literature on compassion-based group therapy than previous reviews on compassion-focused interventions. There has been an increase in the use of CBGI in clinical practice (Kirby, Tellegen & Steindl, 2015) and it is necessary to review the evidence in this area to ensure that these interventions are a plausible choice of treatment in evidence-based practice.

Method

Search Strategy

A systematic review of the literature was conducted between August and October 2018. Databases searched via the EBSCOhost search service were: Medline, PsycInfo and CINAHL. This combination of databases was chosen to increase the likelihood of identifying all relevant literature.

Prior to the full database review an initial search was conducted to familiarise the lead researcher with the literature, and to identify key search terms to be included in the final review. Search terms used in previous reviews on the effectiveness of individual compassion-based interventions (Leaviss & Uttley, 2015) were also considered when selecting the final search terms. The terms "group" AND "compassion focused therapy* OR "compassion-focused therapy" OR "compassion focused program*" OR "compassion-focused program*" OR "compassionate mind training" were used to search the abstracts, titles and keywords of articles.

Selection

All titles from the final search were screened for relevance to the review and duplicates were removed. Abstracts of the remaining papers were reviewed and the following inclusion and exclusion criteria was applied:

Inclusion:

1. Published in a peer reviewed journal
2. Assessed the effectiveness of a compassion-based group intervention (i.e. CMT, MSC or CCT)

3. Assessed outcomes of the effectiveness of the intervention (including symptoms of psychological conditions, self-compassion, self-criticism, etc.)

Exclusion:

1. Book chapters and opinion articles
2. Meditation only interventions (e.g. mindfulness meditation, loving-kindness meditation and compassionate meditation)
3. One-off compassion-based group sessions
4. Studies that included CBGI alongside other psychotherapeutic interventions (e.g. CBT, ACT)
5. Studies where participants received both individual and group compassion-based therapy.

Articles that appeared to meet this criteria were then included in a detailed screening. The full article was also evaluated if it was unclear from the initial review of the title and abstract whether the selection criteria were met. The reference lists of the included papers were then hand searched for relevant articles and the eligibility of these were assessed using the same selection criteria. See Figure 1 for a summary of this process which resulted in 13 articles being selected for inclusion in the review.

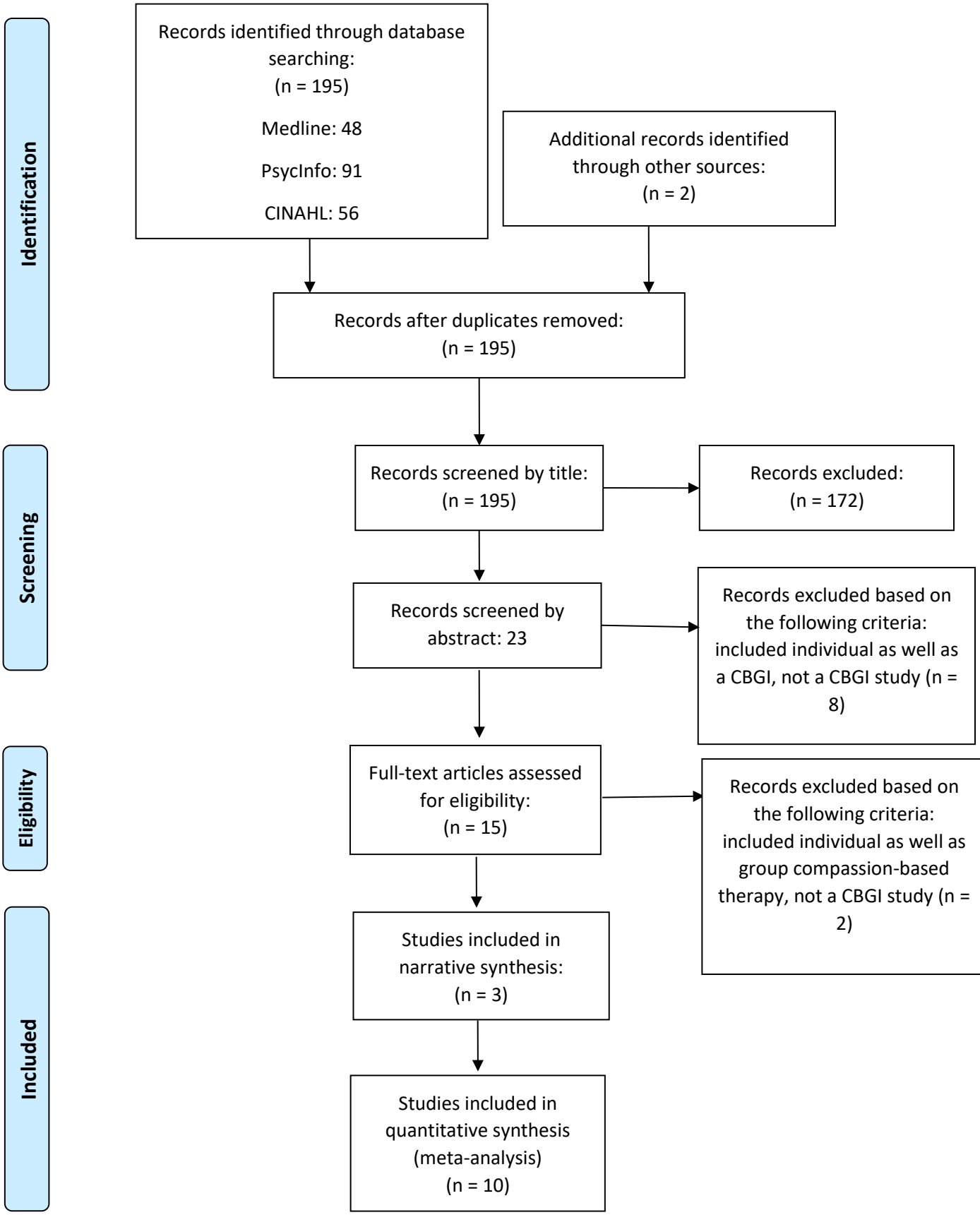
Identification
Screening
Eligibility
Included
Records identified through database searching:
(n = 195)
Medline: 48
PsycInfo: 91
CINAHL: 56
Additional records identified through other sources:
(n = 2)
Records after duplicates removed:
(n = 195)
Records screened by title:
(n = 195)
Records excluded:
(n = 172)
Records screened by abstract: 23
Records excluded based on the following criteria: included individual as well as a CBGI, not a CBGI study (n = 8)
Full-text articles assessed for eligibility:
(n = 15)
Records excluded based on the following criteria: included individual as well as group compassion-based therapy, not a CBGI study (n = 2)
Studies included in narrative synthesis:
(n = 3)
Studies included in quantitative synthesis (meta-analysis)
(n = 10)

Figure 1: Flow diagram of study selection process

Data Extraction and Quality Assessment

Information regarding the aims, design, methodology, participant population, outcome measures and key findings were extracted from each study (see data extraction form; Appendix D). In order to assess the quality of the articles included in the review, a methodological quality checklist was completed for each study. Due to the variation in study designs, a checklist adapted from STrengthening the Reporting of OBservational studies in Epidemiology (STROBE, Von Elm et al., 2007) and the Downs and Black checklist (Downs & Black, 1998) was used to ensure there was no bias in measurement towards any particular methodology.

Inter-rater reliability was assessed by an independent party who reviewed four of the included articles. When differences in opinion occurred this was discussed and an agreement was reached in all cases.

Method of Analysis

Meta-analysis

The data in this review was analysed using a meta-analysis as the majority of studies identified provided quantitative information in a form that permitted this method of analysis. This was conducted on 10 of the total 13 studies included in the review as several studies did not report means and standard deviations required for the analysis, and did not provide them when contacted (see Table 1). The meta-analysis was conducted using the "R meta" statistical package (R Core Team, 2019; Schwarzer, 2007).

The differences between the pre- and post-means and standard deviations were required to complete the calculation. Based on the review question and taking into account the outcome measures used by the studies included in the review, four separate meta-analyses were conducted on the following outcomes; self-compassion, self-criticism, anxiety and depression. Several of the articles reported data on more than one outcome measure, and therefore data from these studies appears in more than one meta-analysis. For studies that reported subscale scores for an outcome measure an assumption was made that there were moderate correlations of .5 between these subscales in order to estimate standard deviations of the full outcome measures.

The majority of studies utilised a single cohort design, however several studies were independent group designs with a control and intervention group. An assumption was

made that the change over time for the cohort studies was the same as the group difference after the intervention was administered in the independent groups design. A random effects meta-analysis was used as this does not assume that the true effect is the same in all study populations. This assumption was deemed to be unreasonable in view of the diversity of the study populations.

Table 1. Summary of the number of studies included in each of the meta-analyses

	Self-compassion	**Self-criticism**	**Depression**	**Anxiety**
No. of studies using outcome measure	4	6	7	7
No. of studies missing relevant data	1	2	1	1
No. of studies included in meta-analysis	3	4	6	6

Narrative Synthesis

The three studies that did not report the necessary data to be included in the meta-analysis did report other findings that indicated the effectiveness of the CBGI. A narrative synthesis was used to describe, aggregate and summarise these results (Popay et al., 2006). The synthesis followed three key steps. Firstly, results were organised to identify patterns within the studies with regards to the effectiveness of the interventions and the relative effect sizes. Secondly, factors that may explain differences in direction and size of effect were considered across the studies. Lastly, conclusions were drawn with regards to how these findings related to the results of the meta-analyses, and the overall effectiveness of CBGI.

Results

Participants

A total of 398 intervention participants were included in the review, with a mean of 31 participants per study (SD = 25.90). These studies are summarised in Table 2. Numbers

of participants varied considerably between groups, ranging from six (Gilbert & Proctor, 2006) to 75 (Anderson, 2017). The total number of control participants was 96 (*M*=24, SD=9.45) ranging from 10 (Noorbala, Borjali, Ahmadian & Noorbala, 2013) to 30 (Jazaieri et al., 2013).

The majority of the studies recruited participants from specific clinical populations, including people living with psychosis, dementia, intellectual disability, personality disorder or depression (Laithwaite et al., 2009; Heriot-Maitland, Vidal, Ball & Irons, 2014; Collins, Gilligan & Poz, 2018; Clapton et al., 2018; Lucre & Corten, 2013; Noorbala et al., 2013). Other studies recruited transdiagnostic samples with a focus on individuals with high shame and self-criticism (Anderson et al., 2017; Judge, MacEwan, Judge, Cleghorn & Gilbert, 2012; McManus, Tsivos, Woodward, Fraser & Hartwell, 2018; Cuppage, Baird, Gibson, Booth & Hevey, 2018; Gilbert & Proctor, 2006). Two studies were also included that used non-clinical samples (Jazaieri et al., 2013; Neff & Germer, 2013).

Interventions and study designs

Three of the studies included in the meta-analyses were randomised control trials, one was a non-randomised control trial and nine of the studies were observational. The studies included comprised eight CMT interventions, one CCT intervention (Jazaieri et al., 2013) and one MSC intervention (Neff & Germer, 2013). Included in the narrative synthesis were three observational CMT studies. All of the studies reported baseline and post-intervention measures of either self-compassion, self-criticism, anxiety or depression, or they provided a combination of these measures. The primary aim for the majority of the studies was to assess the effects of a CBGI on these outcomes for a particular population, or to evaluate the effectiveness of novel compassion-based group interventions for non-clinical populations.

Table 2. Summary description of included studies

Study (country)	Population *(n=)*	Design	Attrition Rates	Intervention	Control	Number of Sessions	Measures	Follow-up	Main Outcomes
Anderson & Rasmussen (2017) **Denmark**	*n = 75* Patients with various psychiatric diagnoses	Observational	14.7%	Compassion Focused Therapy – psychoeducation, emotion regulation, mindfulness, compassionate imagery, addressing the self-critic	None	10 weeks with weekly sessions	Beck Depression Inventory – II (BDI-II), Beck Anxiety Inventory (BAI), Rosenberg Self-Esteem Scale	Not reported	CFT group treatment significantly reduced symptoms of depression and anxiety whilst increasing self-esteem
Clapton, Williams, Griffith, Jones (2016) **UK**	*n* = 6 Individuals with a diagnosis of mild intellectual disability with a history of mental health issues	Observational	1	Adapted CFT – introduction to the model, mindfulness, 'tricky brain', three circles, imagery, flow of compassion, compassionate self	None	6 weekly sessions lasting approx. 90 minutes	Compassion Focused Therapy-Intellectual Disabilities (CFT-ID) Session Feasability and Acceptability Measure, Self-Compassion Scale-	2-4 weeks follow-up	Themes: direct experience of the group, initial difficulties in being self-compassionate, positive emotional changes. Pre and post-group measures indicated significant reductions in

							Short Form, Psychological Therapy Outcome Scale for Intellectual Disabilities, The adapted Social Comparison Scale, Focus Groups		both self-criticism and unfavourable social comparisons.
Collins, Gilligan & Poz (2018) **UK**	*n* = 64 Individuals under the care of the Memory and Assessment Treatment Service (MATS), had a diagnosis of dementia in the last 6 months, had a spousal caregiver	Observational	6%	Compassion Focused Therapy – psycho-education, socialisation to CFT model, compassion circles, forms of compassion, fears and blocks to compassion, flows of compassion, multiple selves	None	6 weekly sessions 2 hour sessions	Hospital Anxiety and Depression Scale (HADS), respiratory rate, Quality of Life in Alzheimer's Disease	None	57% of PwD with borderline to abnormal baseline scores showed clinically significant improvement in anxiety and depression. 80% of spouses showed clinically significant improvements in depression and 50% in anxiety. RR reduced for PwD and spouses with large and

									medium effects respectively. QoL of PwD improved with a large effect.
Cuppage *et al* (2017) **Ireland**	*n* = 87 Clients of an independent, not-for-profit mental health service. Open to both inpatients and outpatients with problematic levels of shame and self-criticism.	Non-RCT	2	Compassion Focused Therapy – psycho-education about human brain, emotion regulation, skills in areas of imagery, behaviour, sensation, emotion, reasoning and attention were taught	TAU. Usual treatment from MDT delivered across inpatient and outpatient settings, including various combinations of regular psychiatric review and pharmacology, and psychoeducation groups related to psychiatric diagnoses. Participants may also have received individual supports	14 sessions twice weekly each lasting 3 hours for 5 weeks, and once weekly for 4 weeks	Brief Symptom Inventory (BSI), Functions of Self-criticism, Fears of Self-compassion subscale of the Fears of Compassion Scale, Other as Shamer Scale, Social Safeness and Pleasure Scale	2 month follow-up	Significantly greater improvements were found for levels of psychopathology, fears of self-compassion and social safeness for CFT compared to TAU. Improvements in shame and self-criticism within the CFT group but not the TAU group.

					such as occupationa l therapy, psychologic al therapy or social work.				
Gilbert and Proctor (2006) **UK**	*n* = 6 Patients with major/severe long-term and complex difficulties receiving treatment in a day centre High shame and self-criticism	Observational	3	Compassionate Mind Training – Focused on nature of self-criticism, explored qualities of self-compassion and fears of developing self-compassion, explored nature of self-attacking	None	12 two-hour group sessions in compassiona te mind training	HADS, Diary, Functions of Self-criticism, Forms of Self-criticism and Self-reassurance , Others as Shamer, Social Compariso n, Submissive behaviour	2 month follow-up	Significant reductions in depression, anxiety, self-criticism, shame, inferiority and submissive behaviour. Significant increase in participants' ability to be self-soothing and focus on feelings of warmth and reassurance for the self
Heriot-Maitland, Vidal, Ball & Irons (2014) **UK**	*n* = 93 Individuals in acute inpatient settings	Observational	34%	Compassion Focused Therapy – psycho-education about our evolved brain, mindfulness, compassion, imagery	None	4 sessions	Pre- and post-session levels of distress and calmness on a 6-point	None	Pre- to post-session data highlighted a significant decrease in distress ratings and a significant increase in

							bubble Likert scale		calmness ratings. Thematic analysis identified themes relating to understanding compassion, experience of positive affect and the experience of common humanity
Jazaieri et al (2013) **USA**	*n = 80* Non-clinical population	RCT	9	Loving-kindness and compassion meditation, psychoeducation around mental experience, integrated daily compassion cultivation practice	Waitlist control	Eight once weekly 2 hour classes	Fears of compassion scales, self-compassion scale	Not reported	CCT resulted in significant improvements in all three domains of compassion. Amount of formal meditation practiced was associated with increased compassion for others.
Laithwaite et al (2009) **UK**	*n = 18* Forensic, maximum security prison, psychosis	Observational	1	Compassionate Mind Training for psychosis	None	20 sessions over 10 weeks (twice weekly)	Social Compassion Scale, Others as Shamer, BDI-II, Rosenberg	6 week follow-up	Significant improvements in depression, self-esteem, psychopathology, shame and social comparison

							Self-Esteem Scale (RSES), Positive and Negative Syndrome Scale (PANSS)		
Lucre & Corten (2012) **UK**	*n* = 8 Individuals with personality disorders	Observational	2	Compassion Focused Therapy – formulation and psycho-education, compassionate mind training, planning for practice (mindfulness and compassionate imagery)	None	16 sessions	Social-comparison Scale, Submissive Behaviour Scale, Other as Shamer Scale, Self-attacking and Self-reassuring Scale, Depression and Anxiety Scale, Clinical Outcomes in Routine Evaluation	1 year follow-up	Significant reductions in shame, social comparison, feelings of hating oneself, and an increase in abilities to be self-reassuring. Significant changes on all CORE variables. Content analysis found that participants found the group process important in enabling them to develop emotional regulation and understanding.

MacEwan *et al* (2012) **UK**	*n* = 27 Heterogeneous group of clients presenting with severe and enduring mental health difficulties to a CMHT	Observational	15	Compassion Focused Therapy – explained the evolutionary model, formulated client difficulties within the CFT model, compassionate mind training.	None	12-14 weekly session lasting 2 hours with a 15 minute break	BDI-II, BAI, Functions of Self-criticism (FSCS), Forms of Self-criticism and Self-reassurance (FSCRS) Internalised Shame Scale, Other as Shamer Scale, Social Compariso n Scale, Submissive Behaviour Scale, Weekly Diary Measuring Self-attacking and Self-soothing	None	Significant reductions were found for depression, anxiety, stress, self-criticism, shame, submissive behaviour and social comparison post-intervention.
McManus *et al* (2018)	*n* = 13	Observational	14	Compassion Focused Therapy	None	16 sessions meeting	FSCS, FSCRS,	None	Significant improvements

UK	Adults receiving a service from CMHT with high levels of shame and self-criticism			– psycho-education, mindfulness, imagery, compassionate thinking, compassionate letter writing, compassionate behaviour		weekly for 2 hours	Others as Shamer, Self-compassion Scale, Mental Health Confidence Scale		were found on all measures used. No significant change on the reassure self subscale of the FSCRS. Participants also provided positive feedback about the group.
Neff & Germer (2012) **USA**	*n* = 54 Non-clinical population	RCT	3	Mindful Self Compassion Program – socialisation to self-compassion, mindfulness, interpersonal skills, emotion regulation, compassionate inner voice, value-based living	Waitlist control group	2 hours a week for 8 weeks	Self-compassion Scale – short form (SCS-sf), Cognitive and Affective Mindfulness Scale – Revised, Compassion Scale, The Avoidance Subscale of the Impact of Event – Revised, Social Connectedness Scale,	6 months and 1 year follow-up	Compared to control group, intervention participants reported significantly larger increases in self-compassion, mindfulness and wellbeing. Gains were maintained at 6-month and 1-year follow-ups.

							Subjective Happiness Scale, Satisfaction with Life Scale. BDI-II, Speilberger State-Trait Anxiety Inventory, Perceived Stress Scale, estimations of informal self-compassion practice		
Noorbala et al (2013) **Iran**	*n* = 19 Iranian individuals with depression	RCT	3	Based on Gilbert's manual of CMT – socialisation to the model, compassionate techniques (imagery, mindfulness, soothing breathing rhythm, compassionate letter writing), addresses fears of	No intervention	12 two- hour sessions twice a week for 6 weeks	BDI-II, Anxiety Scale, Levels of Self-criticism Scale	2 month follow-up	CMT significantly decreases depression and anxiety scores in the follow-up study, but not immediately after the intervention. CMT decreased self-criticism but effect was marginally insignificant

compassion

Inclusion/Exclusion Criteria

Inclusion criteria varied greatly amongst the studies with the most regular item being that participants met the diagnostic criteria of a particular mental health difficulty (e.g. personality disorder, psychosis, etc.). How this was obtained varied between studies, with some specifying that diagnosis must be made by a psychiatrist (Noorbala et al, 2013; Andersen & Rasmussen, 2017) and others relying on psychometric testing (Clapton et al., 2018; Collins et al., 2018). All studies required that participants were aged 18 or over. Other inclusion criteria included gender (all female) (Noorbala, 2013) and language (English speakers) of participants (Collins et al, 2018).

There were common themes amongst the exclusion criteria of the studies including comorbid physical illness, risk to other participants, presence of psychosis (in studies where this was not the target population) and use of substances that could potentially alter participants' ability to participate (e.g. alcohol, sedatives, etc.). Studies that recruited from a specific population of participants excluded individuals with comorbid mental health difficulties, whereas studies using transdiagnostic samples included participants with multiple diagnoses. Six of the studies did not report an exclusion criteria (Neff & Germer, 2013; Jazaieri et al., 2013; Noorbala et al., 2013; Lucre & Corten, 2013; McManus et al., 2018; Gilbert & Proctor, 2006).

Meta-analyses of effectiveness

The effects of compassion based group interventions on anxiety

The results (see Figure 2) indicate that the overall effect of the compassion-based interventions improve levels of anxiety in several clinical and non-clinical populations (standardised mean difference from random effects model = 0.39, 95% CI (-0.76, -0.01), p=0.04). The I-squared statistic is 59%, implying that a substantial part of the variation in effect sizes is due to study heterogeneity rather than chance. It is worth noting that the study with the highest effect size had the lowest (random) weighting (Gilbert, 2006). The effect size for Noorbala (2013) is in the opposite direction to other studies, although this was not statistically significant.

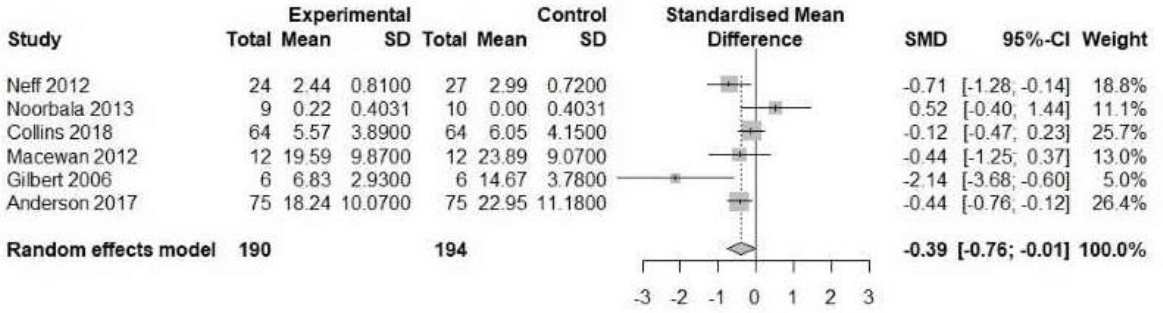

Figure 2. Effects of compassion-based interventions on anxiety.

The effects of compassion based group interventions on depression

Similar to the anxiety meta-analysis the results (see Figure 3) suggest that the overall effect of the compassion-based group interventions improve levels of depression across different populations (standardised mean difference from random effects model = -0.56, 95% CI (-0.99, -0.12), p=<.01). The I-squared statistic is 68%, implying a substantial part of the variation in effect sizes is due to study heterogeneity rather than chance. As for anxiety, Gilbert (2006) reports the highest effect size but the lowest weighting. Again, the effect size for Noorbala (2013) was in the opposite direction to other studies, although this was not significant.

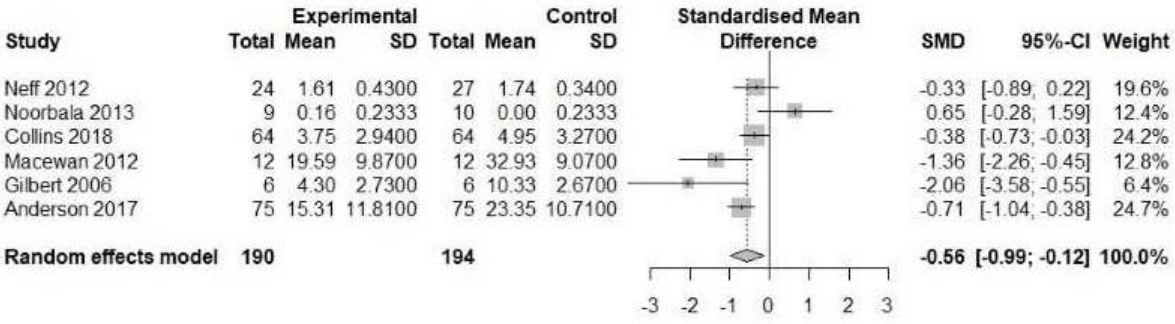

Figure 3. Effects of compassion-based interventions on depression.

The effects of compassion based group interventions on self-compassion

The results of the self-compassion meta-analysis (see Figure 4) move in the overall direction of improvement (standardised mean difference from random effects model = -0.35, 95% CI (-0.72, -0.02), p=0.07). It is possible that this is due to the small number of studies that could be included in the analysis. The effect size of Clapton (2016) was in the opposite direction to other studies, although this was not statistically significant.

The I-squared statistic is 79%, implying a substantial part of the variation in effect sizes is due to study heterogeneity rather than chance.

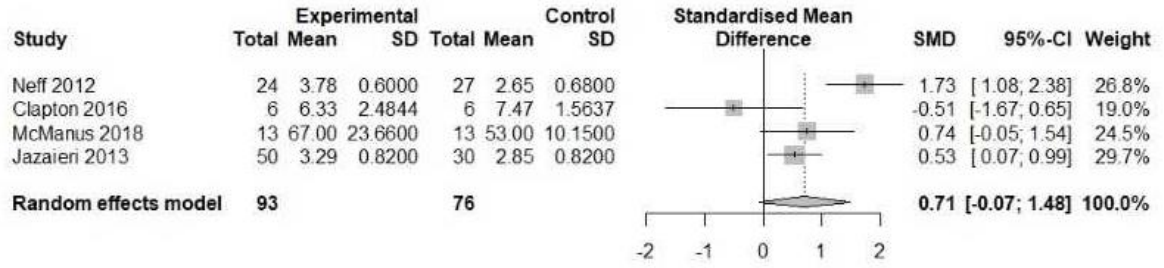

Figure 4. Effects of compassion-based interventions on self-compassion.

The effects of compassion based group interventions on self-criticism

As with the results of the self-compassion meta-analysis the findings for self-criticism move in the overall direction of improvement where the standardised mean difference from random effects model = 0.71, 95% CI (-0.07, 1.48), p=0.07 but was not statistically significant (see Figure 5). Again it is possible that this is due to the small number of studies that could be included in the analysis. The analysis reports 0% variability between the studies, however, this is unlikely to be accurate due to the small number of studies included in the analysis.

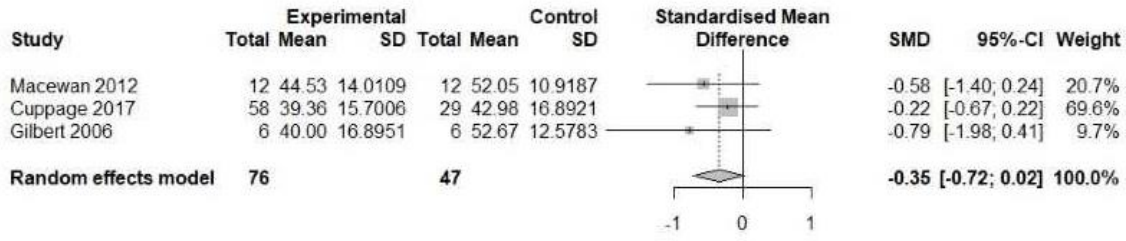

Figure 5. Effects of compassion-based interventions on self-criticism.

Narrative Synthesis

All three of the studies included in the narrative synthesis reported positive effects on the different outcome variables used in the CBGI. Effect sizes were only reported for one of the studies (Laithwaite et al, 2009) and therefore it was not possible to compare the relative effect sizes of the interventions. The effect sizes reported by Laithwaite et al (2009) range from small to medium. This is in keeping with the effect sizes found for the meta-analyses which also ranged from small to medium.

Two of the three studies (Laithwaite et al., 2009; Lucre & Corten, 2013) reported significant decreases in depression. This is in keeping with the results of the meta-analysis which suggested that the overall effect of the compassion-based interventions improved levels of depression across different populations. However, the only study included in the narrative synthesis that measured anxiety did not report significant change on this outcome, although scores were found to move in the direction of improvement (Lucre & Corten, 2013). This is not reflected in the findings of the meta-analysis which indicate that the overall effect of the compassion-based interventions improve levels of anxiety.

Furthermore, Lucre and Corten (2013) also reported significant improvements in self-criticism. Again, this is not reflected in the findings of the meta-analysis which found that although the findings for self-criticism move in the overall direction of improvement this was not significant. In relation to self-compassion, none of the three studies included in the narrative synthesis utilised self-compassion measures. Therefore, it is not possible to compare the effects of the group interventions in these studies to the findings of the meta-analysis.

Dose and Delivery

The dose and delivery of the compassion based group intervention varied greatly between studies, with differences in; number of sessions, number of hours of clinician time, number of weeks the session was administered over, the length of each session.

The frequency of these interventions varied with nine studies utilising weekly sessions, three using twice-weekly sessions and one that used a combination of both. There was little variation in the effect sizes between interventions that utilised weekly sessions and those that ran twice-weekly. The interventions lasted between four weeks (Heriot-Maitland et al., 2014) and 16 weeks (McManus et al., 2018). Both studies reported significant improvements on the outcome measures, although McManus et al. saw improvements on a greater number of outcomes. The mean duration of the compassion-based interventions was nine and half weeks. The mean length of the sessions was 2.25 hours. Session length ranged from one and a half hours (Clapton et al., 2018) to three hours (Cuppage et al., 2018). Both of these studies reported significant improvements on outcome measures. However, as with the differences between duration of the compassion-based interventions, longer sessions reported bigger effect sizes and significant changes on a greater number of outcomes.

The dose of the intervention also varied, ranging from 4 hours (Heriot-Maitland et al., 2014) to 42 hours (Cuppage et al., 2018). Three studies delivered the intervention in ten hours or less, and all found positive outcomes on the post-measures. However, fewer outcome measures were used across these studies, and fewer significant findings were reported. Seven studies delivered between 12-24 hours of the compassion-based intervention, with all reporting significant changes in depression, anxiety, self-criticism or self-compassion, or a combination of these factors. Of these studies, four reported that these changes were maintained at follow-up. The remaining studies delivered the interventions in 28-42 hours of clinical time, and all saw similar significant changes to those delivered over fewer hours.

Attrition

The overall attrition across all studies was 21%, with dropout rates ranging from low (2.3%) to high (51.8%). Studies with high attrition rates included participants with complex and enduring mental health problems (McManus et al., 2018; Heriot-Maitland et al., 2014; Gilbert & Proctor, 2006). However, there are exceptions to this including Cuppage et al. (2017), which found rates as low as 2.3% for a transdiagnostic population including participants with, personality, psychotic and trauma-related disorders.

Quality Assessment

A summary of quality ratings is reported in Appendix F.

The quality assessment revealed that, overall, the articles scored highly for their explanation of the relevant literature and rationale for the study, clearly describing the main outcomes to be measured and the main findings of the investigation. Studies generally scored highly on choosing appropriate statistical tests to assess the main outcomes, and, overall, these were well described. Studies commonly did not fully explain how the rationale for the study size was reached, did not ensure participants were representative of the entire population from which they were recruited and failed to indicate the number of participants with missing data for each variable of interest. There was variation in the number of studies which provided information about confounder variables and controlled for these within the statistical testing. It is also important to note that only three of the 13 studies were controlled trials, with two of these being randomised.

Despite the majority of studies providing a clear rationale for the research, there was variation in the clarity of the intentions of the studies. For example, some studies provided clear aims to improve scores on specific outcomes measures (e.g. anxiety, depression, etc.), whereas others stated the aim was to evaluate the effectiveness of the group intervention but did not provide clear details as to how this would done.

Discussion

The focus of the review was to evaluate the effectiveness of CBGI with the aim of updating previous reviews and providing a more focused evaluation of this type of therapy. It was hoped that conducting this review would provide an understanding of the efficacy of a range of CBGI, which could inform future clinical practice and service delivery. The findings provide some evidence to support the use of compassion-based groups as an effective psychotherapeutic intervention, although sufficient evidence was not found to support effectiveness for all outcomes.

Group effectiveness

The analyses found evidence for improvements in both anxiety and depression, and the results for self-compassion and self-criticism were both approaching significance. This lends limited support to the findings of the descriptive synthesis conducted by Leaviss and Uttley (2015) which found that CFT is effective in reducing self-criticism. It is possible that the current review did not find significant effects for self-compassion or self-criticism due to the small number of studies that were included in the analyses of self-criticism and self-compassion. Furthermore, Leaviss and Uttley used evidence from a combination of individual and group based interventions. The evidence that can be gained from CBGI alone is not yet be sufficient to support the effectiveness of this intervention method in reducing levels of self-criticism and self-compassion.

The narrative synthesis found similar improvements in depression to the meta-analysis but anxiety was not measured by any of the studies included. Only one of the papers included in the narrative synthesis reported a measure of self-criticism, and significant improvements were found. Similarly, only one study utilised a measure of self-compassion but despite change in the direction of improvement this was not found to be significant. Based on these findings it is important for future studies to include measures of self-compassion and self-criticism in order to evaluate the impact of the intervention on these outcomes.

Study Quality

The quality assessment revealed that most studies did not have a rationale for the study size, did not indicate the number of participants with missing data for each variable of interest and failed to ensure participants were representative of the entire population from which they were recruited. The first two points appear to be issues with the quality of the report rather than an issue with the study design. However, the final point suggests an issue with the sampling method being used by the majority of the studies. Due to the nature of the populations included in the studies and limitations in the capacity of the studies themselves it is understandable why they have not attempted to ensure participants are representative of the whole population they were recruited from. However, for future studies it may be important to recruit more representative samples so that findings can be more confidently extrapolated to the wider population.

As only three of the 13 studies were controlled trials a considerable limitation of the observational studies included in the current review is that they are unable to infer cause and effect between the therapies delivered and measured outcomes, meaning that it is difficult to attribute any positive effects found in the review to the interventions included in these studies.

Limitations

Due to the large variation amongst outcome measures used in the studies and how these were reported in the articles it was necessary to make multiple assumptions with regards to the comparability of these measures. This has implications for the accuracy of the meta-analysis results as the outcome measures used in the different studies may not have measured the concepts (e.g. depression, anxiety, self-compassion, and self-criticism) in the same way.

Furthermore, for the meta-analyses an assumption was made that change over time for the observational studies was the same as the group difference after the intervention was administered for the RCTs. As previously discussed, observational studies cannot infer cause and effect and therefore it is possible that the effects found by the meta-analyses may not be due to the CBGI.

Unfortunately, three studies identified for the review had not provided the necessary data and therefore could not be included in the meta-analyses. This has implications for the findings of the meta-analyses as the inclusion of these studies may have affected the outcome of the analyses. The findings from the narrative synthesis are in the same

direction as the studies included in the meta-analysis and therefore may not have changed the overall findings, but this cannot be concluded with certainty.

Implications for Research

As previously mentioned there is a dearth of RCTs evaluating the effectiveness of CBGI. There are potential ethical considerations when using RCTs to study clinical populations (Levine & Lebacqz, 1979), however, in order for CBGI to be considered as an effective alternative to other psychological interventions (e.g. Cognitive Behavioural Therapy; CBT) more RCTs need to be conducted. As CBT has an extensive evidence base (David, Cristea & Hofmann, 2018) it is important that future RCTs compare the effectiveness of CBT and CBGI to assess whether compassion-based group therapies should be recommended as an alternative to CBT.

As only one study was identified that evaluated the effectiveness of each of the non-CMT interventions (CCT and MSC) it is important that future research focus on contributing to the evidence base for these interventions. It may also be useful to compare the effectiveness of CCT, MSC and CMT to identify the benefits of each intervention and any potential differences in efficacy.

Future research also needs to ensure that follow up data is collected in order to evaluate the longitudinal effectiveness of the intervention. For CBGI to be recommended as an alternative to existing evidence based therapies it is important to provide confirmation that these interventions lead to lasting change.

Implications for Practice

The findings of the meta-analyses support the effectiveness of CBGI for improving levels of anxiety and depression for individuals with a variety of mental health difficulties, as well as non-clinical populations. However, the meta-analyses does not provide evidence to support CBGI as an effective way to improve self-compassion and self-criticism, and therefore the review cannot recommend that CBGI be used in clinical practice to address difficulties in these areas.

With regards to the dose and delivery of the CBGI, the incidental findings of the review suggest that the optimum dosage is between 12-24 hours which should ideally be delivered over weekly three hour sessions to achieve the most significant improvements on the outcome measures. This could be over a minimum or four sessions and a maximum of eight.

Conclusion

There is a growing interest in administering CBGI for both clinical and non-clinical populations. Research appears to be expanding from the more frequently researched CFT group adaptation of CMT into other compassion-based interventions. It is possible that this reflects the growing demand on mental health services and the emphasis on compassionate care in the current service provider climate (e.g. 'Care and Compassion'; Health Service Ombudsman, 2011).

The findings of this review indicate that CBGI are effective in reducing anxiety and depression, and that they are approaching significance for self-compassion and self-criticism. The current review found no evidence to support CBGI as an effective way to improve self-compassion and self-criticism, and therefore cannot recommend that CBGI be used in clinical practice to address difficulties in these areas. There are several limitations of the current review that need to be taken into consideration when contemplating these findings.

Despite the increase in popularity of CBGI evidence is still lacking to support such interventions as an alternative to other more extensively evidenced treatments. More RCT research is needed before conclusions can be made regarding the effectiveness of CBGI on self-compassion and self-criticism outcomes.

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Part Two

Empirical Paper

Agents of Change in a Staff Compassionate-Mind Training Group

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Abstract

Objectives and design. This observational feasibility study aimed to pilot a methodology to identify the agents of change within group Compassionate Mind Training (CMT) using a healthcare staff population.

Methods. Twelve participants engaged in eight sessions of weekly group CMT. Participants completed measures of depression, anxiety, stress, and the flow of compassion at pre-treatment, post-treatment and at a three month follow-up. Measures were also taken of participants' experiences of each group session alongside weekly group discussions and individual written responses.

Results. Significant improvements in levels of stress and self-compassion were found, as well as increases in participants' abilities to self-soothe and accept compassion from others. The study found that both psychoeducation and compassionate exercises are vital ingredients within CMT, each contributing something different to the development of compassion.

Conclusions. Both psychoeducation and experiential compassionate exercises are needed in CMT to bring about effective change. The proposed methodology was found to be appropriate for identifying the agents of change within group CMT. Limitations and improvements to the methodology are discussed.

Introduction

Definition of CMT

Compassion-focused therapy (CFT) is an "integrated and multimodal" approach that incorporates elements of evolutionary, Buddhist, social, and developmental psychology, and neuroscience. The primary focus of the therapy is to use compassionate mind training to help people develop and utilise experiences of inner warmth, safeness and soothing through compassion and self-compassion (Gilbert, 2009).

CFT was originally developed to treat shame, self-loathing and self-attack (self-criticism). The goal of CFT is to alleviate this suffering by helping individuals to develop the care-giving (compassionate) system, thereby increasing qualities of non-judgement, strength, warmth and empathy, and reducing the more negative thoughts and emotions associated with the other systems (the threat system and the drive system) (Gilbert, 2009). The model emphasises the importance of offering knowledge and skills which help cultivate inner compassion in order to improve well-being.

Compassion is an increasingly popular area of interest within psychotherapy research (Gilbert, 2014, Kirby, Tellegen & Steindl, 2015) and as a result there is a growing amount of research to support the effectiveness of compassion-focused therapy (CFT) in enhancing compassion and improving general well-being. As CFT is gathering momentum, it is being used more frequently by clinicians for both clinical (service users) and non-clinical (staff) populations. However, as Kirby (2016) identifies, no studies have yet been conducted to identify the mechanisms of change or active ingredients in CFT: what actually makes it work? The current study aims to identify what these active ingredients may be in a staff CFT group.

Group CMT

Despite the relative novelty of CMT groups there is an increasing evidence base to suggest that they are an effective therapy for reducing depression and anxiety, with some research suggesting they also have a positive impact on levels of self-criticism and shame (Gilbert, 2009). CMT focuses on creating affiliative experiences and reducing shame, which when shared with others in a group context can have powerful effects (Bates, 2005; Gilbert & Proctor, 2006). Further studies have found group-based CMT to be effective for a number of clinical populations including clients with diagnoses of personality disorders (Lucre & Corten, 2013), eating disorders (Gale, Gilbert, Read & Goss, 2014), intellectual disabilities (Clapton, Williams, Griffith & Jones, 2016) and

dementia (Collins, Gilligan & Poz, 2018). However, to date no research has been conducted to investigate what makes these groups effective.

Agents of Change

Compassion is an increasingly popular area of interest within psychotherapy research (Gilbert, 2014; Kirby, Tellegen & Steindl, 2017) and as a result there is a growing amount of literature to support the effectiveness of CMT in enhancing compassion and improving general well-being. As CMT interventions are gathering momentum, they are being used more frequently by clinicians within non-clinical populations. However, as Kirby (2016) identifies, no studies have yet been conducted to identify the mechanisms of change or active ingredients in CMT: what actually makes it work? In order to identify the agents of change within CMT the main elements of the group must first be identified.

1. Psychoeducation

Gilbert (2009) emphasises the importance of enabling individuals to develop an understanding of the functions of their difficulties in terms of safety strategies. This psychoeducation is reported to be vital as it helps the client to recognise that their presentation is "not their fault", but rather the result of their biology and environment. Without psychoeducation it is unlikely that individuals would be able to begin to develop a compassionate understanding of why it was necessary to develop these safety strategies. In CMT this understanding allows individuals to stop criticising and blaming themselves, and enables them to work towards taking responsibility and learning to cope.

2. Compassionate Exercises

In 'The Compassionate Mind' (Gilbert, 2010) Gilbert identifies mindfulness and compassionate-mind techniques as core elements of CMT. These techniques enable individuals to develop an internal compassionate rapport with themselves to replace a blaming, self-critical relationship. Compassionate exercises involve nurturing feelings of warmth, kindness and support for oneself and for others, as well as engaging mindfully in a range of activities. Within CMT these range from simple breathing tasks to more complex imagery exercises.

3. Group Element

Previous literature also suggests that the group element of an intervention can impact therapeutic outcomes (Ogrodniczuk & Piper, 2003; Fuhriman & Burlingame, 1990). Research indicates that there are a number of therapeutic factors associated with group interventions including vicarious learning, role flexibility (client as both help seeker and help provider), and universality (group member's realisation that other members are struggling with similar problems). The benefits of delivering CMT in a group format include providing participants with the opportunity to develop their skills of offering compassion to others, and provides a safe space to practice accepting compassion from others (Kolts, 2010).

The available research indicates that collectively the individual skills and techniques used in CMT are effective in improving well-being and self-compassion in both individual (Matos et al., 2017) and group therapy settings (Gilbert & Proctor, 2006). There appear to have been no studies that have attempted to identify the effective components in CMT group work. In identifying which elements of CMT are most effective in bringing about positive change, this information could be used to alter both the content of CMT groups and how they are delivered, with the aim of making them more effective and efficient in bringing about clinical change. Furthermore, if CMT groups were to be more effective for participants, this may also increase the group's time and cost effectiveness, which is becoming increasingly important to the modern day functioning of the NHS. In addition, the increasing pressures on healthcare staff make this study timely and relevant in order to understand more about how best to support workforce mental wellbeing (Saha, Sinha & Bhavsar, 2011). As this is the first study to attempt to identify agents of change it is also a feasibility pilot of a method of assessment of agents of change in a CMT group.

Research aims:

1. To assess the effectiveness of a staff CMT group
2. To assess the feasibility of identifying agents of change in CMT groups
3. To identify 'agents of change' in a staff CMT group

Method

Design

This exploratory longitudinal study used a mixed methods design, drawing on both quantitative and qualitative questionnaires, and short focus groups. Weekly measures

enabled an analysis of the relative self-reported effectiveness of the content of each session and tracked this over the course of training. Measures of impact, ease and frequency for psychoeducation, compassionate exercises and group discussions were correlated with changes in the outcome measures. End of session impact ratings were compared to retrospective ratings of the session collected the following week. Qualitative data was used to generate themes around how the training was experienced and to triangulate with the quantitative findings.

Participants

The study involved 12 NHS employees from both clinical and non-clinical backgrounds who volunteered to participate in the CMT group. The range of roles included community psychiatric nurses, administrative staff and both trainee and qualified clinical psychologists. On average participants attended 86% of the group sessions, with attendance ranging from 38%-100%. The group was facilitated by an experienced CMT practitioner. Participants were recruited via email correspondence sent to all staff members at a local NHS trust. To reduce selection bias participants were selected on a first-come-first-served basis. Staff members were excluded from the study if they were on sick leave or were suspended by the Trust at the time of recruitment. The CMT group consisted of 8 weekly sessions lasting 2 hours (Irons & Beaumont, 2017). The content of each session is outlined in Table 1. Each session comprised three core elements of CMT: psychoeducation; group discussion and compassion exercises. 14 participants were invited to attend the CMT group. One did not attend the first session and another dropped out after the first week due to anonymity concerns. There were 11 women and one man, with an age range of 24-51. At the initial session participants reported variation in levels of prior experience of mindfulness and compassion-focused theory. Some reported having had no experience whilst others shared that had either received training in compassion-focused therapy or that they engaged in regular mindfulness practice.

Procedure

Ethical approval was obtained from the local University Ethics Committee. All participants gave written consent to take part in the study. At the beginning of the first session participants were asked to complete a short form providing information about their age, gender and any prior experience they had of engaging with CMT or mindfulness.

Quantitative data was collected to test for changes in a range of psychological outcomes pre and post the group. In weeks one to eight a self-report questionnaire collected end of session impact ratings. This also included a free response question regarding the impact of the session overall. In weeks two to eight a short focus group style discussion collected participant data about the previous week at the beginning of each session. In addition a self-report questionnaire was completed at the beginning of each session to rate the previous week's session in terms of impact, ease of use and frequency of use. A summary of the data collected at different time points is provided in Appendix S.

Table 1. Summary content of the CMT staff group programme.

Session number and title	***Content and key elements***	***Specific experiential practice(s)***
Session 1: Why do we need compassion?	Introduction and exploration around concept of compassion. Psychoeducation of tricky brains, old brain new brain loops	Mindfulness of sound and mindful body scan
Session 2: Understanding our motives and emotions	Compassionate motivation vs competitive motivation. Psychoeducation of 3 systems model	Mindfulness of sound, soothing breathing rhythm, safe place imagery
Session 3: Developing our compassionate self	Psychoeducation on 3 systems model, visual cliff video, discussion around qualities of compassion	Soothing breathing rhythm, safe place imagery, developing compassionate self imagery
Session 4: Developing our Compassionate Self (Compassion flowing out)	Psychoeducation of compassion as a flow (compassion flowing out), fear of compassion scale (compassion for others), group discussion around fears blocks and resistances to compassion	Compassionate self exercise, compassionate self – directing compassion to others
Session 5: Opening to the compassion of others (Compassion flowing in)	Psychoeducation of compassion as a flow (letting compassion in), fear of compassion scale (compassion from others), group discussion about missing kindness from others, fears of compassion (compassion from others)	Compassionate self – directing compassion to others, receiving compassion using memory, compassionate imagery – creating compassionate ideal
Session 6: Turning up for yourself (self-compassion)	Psychoeducation – compassion as a flow (self-to-self), ladder slide (going back a step if it gets too	Compassionate ideal, compassionate imagery – directing compassion towards

	hard), fear of compassion scale (compassion towards self)	others, compassionate letter writing
Session 7: Developing a compassionate mind (working with self-criticism)	Discussion around understanding self-criticism, reflections on own self-criticism, discussion around self-criticism vs self-compassion	Compassionate letter writing, flow of compassion exercise (A to B), functions of self-criticism, imagery of self-critic, compassion for self-critic
Session 8: Developing a compassionate mind (working with the many parts of us)	Role of emotions, discussion around using compassionate mind to help think about arguments, discussion around endings, "sustaining our compassionate mind worksheet"	Compassion to self-critic, multiple selves, compassion in flow exercise (go round group practicing giving and receiving compassion)

Measures

1. Pre- and post-measures:

The following measures were administered to all participants before the start of the CMT group and at the end of the 8 sessions:

Depression Anxiety and Stress Scale (DASS21)

This is a shortened version of the DASS42 (Lovibond, 1983) consisting of 21 items. Three subscales measure levels of Depression (M = 7.19), Anxiety (M = 5.23) and Stress (M = 10.54). These are normative means taken from a student population. Participants are asked to rate how much each statement applied to them over the past week on a 4-point scale. Higher scores on the subscales indicate higher levels depression, anxiety and stress. The DASS-21 subscales have good reliability, with internal consistency scores of .94 for Depression, .87 for Anxiety and .91 for Stress. The clinical cut-off scores can be found in Table 2.

Table 2. Clinical cut off scores for the DASS-21.

Meaning	**Depression**	**Anxiety**	**Stress**
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely Severe	28+	20+	34+

Forms of Self-Criticising/Attacking and Self-Reassuring Scale (FSCRS)

The FSCRS measures self-criticism and the ability to self-reassure (Gilbert et al., 2004). It is a 22-item scale that measures different ways people think and feel about themselves when things go wrong for them. The items make up three components: Inadequate Self (*M* = 16.75), Hated Self (*M* = 3.86) and Reassured Self (*M* = 19.81). These are normative means taken from a student population. Higher scores on the Inadequate Self and Hated Self subscales indicate higher levels of self-criticism, whereas higher scores on the Reassured Self subscale suggest an ability to self-soothe (range = 0-88). The Inadequate Self subscale has excellent internal consistency (.90), and good internal consistency was reported for the Hated Self (.86) and Reassured Self (.86) subscales.

Self-Compassion Scale (SCS)

Developed by Neff (2003) the SCS assesses trait levels of self-compassion. The scale indicates items that measure how often people respond to feelings of inadequacy or suffering with Self-kindness (*M* = 3.05), Self-judgement (*M* = 3.14), Common Humanity (*M* = 2.99), Isolation (*M* = 3.01), Mindfulness (*M* = 3.39) and Over-identification (*M* = 3.05). Higher scores on the SCS indicate high levels of self-compassion in response to suffering. All subscales have good internal consistency; Self-kindness (.78), Self-judgement (.77), Common Humanity (.80), Isolation (.79), Mindfulness (.75) and Over-identification (.81). The global scale has excellent internal consistency (.92). Clinical cut off scores can be found in Table 3.

Table 3. Clinical cut off scores for the SCS.

Meaning	**Individual Subscale Score**
Low self-compassion	1-2.5
Moderate self-compassion	2.5-3.5
High self-compassion	3.5-5

The Compassionate Engagement and Action Scales (CEAS)

Developed by Gilbert et al (2017) the CEAS is a measure of the flow of compassion: compassion from others, compassion for others and self-compassion. Each subscale measures six competencies that facilitate turning towards and engaging in suffering and four competencies that facilitate actions to alleviate and prevent suffering. Higher scores

on the CEAS suggest high levels of engagement with the compassionate perspective and high levels of compassionate behaviour towards the self and others. The compassion to others subscale has excellent internal consistency for both engagement (.90) and action (.94). The compassion from others subscale has good internal consistency for engagement (.89) and excellent internal consistency for action (.91). The self-compassion subscale has good internal consistency for engagement (.77) and excellent internal consistency for action (.90).

2. End of session quantitative and qualitative reflective questions:

A self-report questionnaire was created for the purpose of this study (see Appendices Q & R). This incorporated a series of Likert scales aimed to assess the impact of the session just delivered in terms of the three elements of the CMT group: psychoeducation, group discussion and compassion exercises. For each element, participants were asked to rate its impact on a five point scale with semantic anchors ranging from very negative to very positive. Participants were also asked to describe the impact of the session on themselves.

3. Beginning of session focus groups:

Fifteen minute group discussions were conducted and audio recorded by the group facilitator at the beginning of each session commencing from week two. The aim was to provide qualitative data around the participants' experiences of applying the content of the previous session over the past week. In order to ensure that the relevant data was collected each week, the same three questions were used in each focus group: "What have you found useful from the previous session?"; "What have you not found useful/has been unhelpful?"; "What have the barriers/facilitators been?".

4. Beginning of session CMT rating questions:

A further self-report questionnaire was administered at the start of each session commencing in week two in order to provide quantitative data regarding the content of the previous week's session (see Appendix XX). This followed a similar format to the end of session questionnaire incorporating a series of Likert scales aiming to assess the three elements of the CMT group: psychoeducation, group discussion and compassion exercises. For each element, participants were again asked to rate its impact, and were also asked how much they had used it (ranging from not at all to everyday) and how easy they had found using it (ranging from very difficult to very easy).

Data Analysis

As this was a pilot exploratory study in which all participants of the group will provide data a sample size calculation is not applicable.

Quantitative Data

Changes on the DASS-21, FSCRS, SCS and the CEAS were analysed with SPSS 25 using the Wilcoxon signed-rank test.

The Spearman Rank correlations between changes in scores on all ten subscales of the outcome measures and participants ratings of the impact, frequency of use and ease of use were calculated for psychoeducation (see Table 5), compassionate exercises (see Table 6) and group discussions (see Table 7) across the 8 weeks.

Qualitative Data

The qualitative data collected via the end of session questions and the group discussions were analysed using thematic analysis (Braun & Clarke, 2006). Firstly, the author familiarised herself with the data and generated initial codes. These codes were searched for themes which were then reviewed before being named and defined (see Appendix U). The overarching themes amongst this initial set were then identified for both the data collected from the qualitative questions and the group discussions across the eight sessions.

Follow-up

A 3-month follow-up was arranged to gather information with regards to the longitudinal effects of the CMT group. The follow-up session was designed to provide information about the long-term impact of the content of the group and to assess which elements of the group (if any) were still being found useful after a 3-month period. The measures that were used throughout the initial study were re-administered. This included the pre- and post-measures and the Likert scales. A group discussion was also held which focused on the same questions as the group discussion from the initial study. Unfortunately only two participants were able to attend the follow-up.

Results

Overall change in participant mood and flow of compassion

The scores on the FSCRS Hated-self, FSCRS Inadequate-self and all subscales of the DASS21 decreased, whilst the scores on the FSCRS Reassured-self subscale, SCS and

all subscales of the CEAS increased. The scores on all subscales moved in the direction of improvement. The results are presented in Table 4.

FSCRS: Using the three-factor structure, scores on the *Reassure Self* subscale significantly increased pre- (M=19.00) to post group (M=24.76, z = -2.53, p = 0.008). There was no significant change on the *Inadequate Self* (z = -1.82, p = 0.070) or *Hated Self* (z = -1.19, p = 2.97) subscales, although it is worth noting that changes on the *Inadequate Self* subscale were close to significance.

CEAS: Post-group scores were significantly higher for the *Compassion from Others* (M=76.76, z = -2.76, p = 0.003) and *Compassion to Self* (M=81.76, z = -2.95, p = 0.001) subscales compared to pre-group (M=62.41 and M=66.00 respectively). No significant changes were found on the *Compassion to Others* subscale (z = -.89, p = 0.412).

DASS21: No significant changes were found for the *Depression* (z = -1.00, p = 0.422) and *Anxiety* (z = -1.49, p = 0.172) subscales. Scores on the *Stress* subscale significantly decreased pre (M=7.54) to post group (M=3.33), z = -2.15, p = 0.030).

SCS: Scores significantly increased pre (M=76.72) to post group (M= 96.73, z = -2.94, p = 0.001).

Table 4. Changes in scores on self-report measures pre- and post-therapy group

Scale	**Subscale**	**Pre-mean (SD)**	**Post-mean (SD)**	**Test Norm Mean (SD)**	***z* score**	***p* value**
FSCRS	Inadequate Self	16.60 (8.94)	12.33 (6.31)	16.75 (8.44)	-1.82	.070
	Reassure Self	19.00 (5.32)	24.76 (3.11)	19.81 (4.48)	-2.53	.008*
	Hated Self	3.00 (3.10)	1.60 (1.91)	3.86 (5.92)	-1.19	.297
CEAS	Compassion to Others	84.16 (9.79)	85.33 (10.10)	71.56 (8.26)	-.89	.412
	Compassion from Others	62.41 (20.55)	76.76 (11.64)	59.49 (8.77)	-2.76	.003*
	Compassion to Self	66.00 (11.87)	81.76 (6.10)	61.97 (5.90)	-2.95	.001*
DASS21	Depression	4.54 (4.37)	3.91 (1.17)	7.19	-1.00	.422

				(6.54)		
	Anxiety	4.63 (4.63)	2.50 (3.31)	5.23 (4.83)	-1.49	.172
	Stress	7.54 (5.44)	3.33 (2.93)	10.54 (6.94)	-2.15	.030*
SCS	Total	76.72 (17.78)	96.83 (15.34)	81.25 (16.75)	-2.94	.001*

*SD: standard deviation, *Significant at p = 0.05 level (two-tailed test)*

Correlations between weekly ratings and outcome measure changes

Moderate to strong correlations of .6 or above in absolute value are presented in Table 5, Table 6 and Table 7 (See Appendix T for all correlations).

The results show the highest frequency of strongest correlations occurred for psychoeducation, followed by compassionate exercises. This is supported by participants' responses from the individual responses and group discussions, which focused on the impact of these two elements on their understanding of themselves and others.

Ratings of Impact and Frequency of Use correlated more strongly than did Ease of Use ratings with changes in the outcome measures. Again, this is consistent with the findings of the qualitative data which identified themes relating to both the impact the group content had on participants' knowledge and understanding, and the more practical focus on practicing what was covered in sessions.

Ratings from weeks 6 and 9 (relating to weeks 5 – *Opening to the Compassion of Others* and 8 – *Developing a Compassionate Mind*) gave the greatest number of strong correlations with outcome measure changes. The thematic analysis identified that during these weeks participants wrote about developing deeper self-awareness (week 5) and a determination to practice compassion (week 8).

Finally, changes on the DASS21 Stress sub-scale and all sub-scales of the FSCSR were more strongly correlated with participants' ratings on the weekly measures than other outcome measure changes.

Table 6. Correlations of .6 and above between change in pre- and post-measures and ratings of psychoeducation exercises

Psychoeducation Exercises			Weekly Ratings							
			2	3	4	5	6	7	8	9
Impact	DASS	Depression								
		Anxiety								
		Stress								
	FOSC	Inadequate					-0.73			0.61
		Reassure								
		Hated					-0.61			-0.62
	CEAS	To others		0.76						
		From others								
		To Self								
	SCS	Self-								
Frequency of Use	DASS	Depression								
		Anxiety								
		Stress		-0.7		-0.71	-0.76	-0.62		-0.64
	FOSC	Inadequate			-0.65					
		Reassure	-0.63							
		Hated								
	CEAS	To others								
		From others						-0.63		
		To Self								
	SCS	Self-								
Ease of Use	DASS	Depression								
		Anxiety								
		Stress								
	FOSC	Inadequate								
		Reassure								-0.62
		Hated					-0.66			-0.62
	CEAS	To others			0.81					
		From others								
		To Self								
	SCS	Self-								

Table 7. Correlations of .6 and above between change in pre- and post-measures and ratings of group discussions

			Weekly Ratings							
Group Discussions			**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Impact	**DASS**	**Depression**								
		Anxiety								
		Stress								
	FOSC	**Inadequate**					-0.6			
		Reassure							-0.66	
		Hated								
	CEAS	**To others**								
Ease of Use	**DASS**	**Depression**								
		Anxiety								
		Stress								
	FOSC	**Inadequate**								
		Reassure		-0.61					-0.61	
		Hated					-0.84			
	CEAS	**To others**								
		From others								
		To Self								
	SCS	**Self-**								

		From others								
		To Self								
	SCS	Self-compassion								
Frequency of Use	DASS	Depression								
		Anxiety								
		Stress								
	FOSC	Inadequate								
		Reassure								
		Hated								
	CEAS	To others								
		From others								
		To Self								
	SCS	Self-compassion								
Ease of Use	DASS	Depression								
		Anxiety								
		Stress								
	FOSC	Inadequate								
		Reassure								
		Hated								
	CEAS	To others								
		From others								
		To Self								
	SCS	Self-compassion								

Overarching Themes

Qualitative Questions –end of session

For the qualitative questions answered at the end of each session distinctive overarching themes for each week of the CMT group were generated (see Table 8 for themes and Table 9 for corresponding quotes).

1. Knowledge

In Week One staff members wrote about how the content of the session had impacted upon their knowledge of the concept of compassion. It was apparent that for some participants the session content consolidated knowledge that they already possessed. The psychoeducation provided in the first session was also referenced by several participants in relation to its impact on their understanding of how the human brain functions and how this information began to challenge the idea that they are to blame for their own suffering.

2. Value of Change

In Week Two there seemed to be an acknowledgement amongst the participants of the importance of making changes to increase compassion within their lives. There was also a sense of enthusiasm as participants wrote about feeling motivated in practicing compassion to bring about this change.

3. Challenges

At the end of Week Three staff members wrote about the difficulties they were experiencing with practicing compassion, particularly in relation to the compassionate exercises which were reported to have increased in difficulty. There was a sense of a "reality check" from the initial enthusiasm of Week Two, and a realisation that practicing compassion is challenging. However, participants continued to reference a motivation to practice the compassionate exercises.

4. Progress

Despite acknowledging the challenges of the compassionate exercises, in Week Four staff members wrote that they were beginning to find the exercises easier to practice. As well as experiencing progress with the compassionate exercises, the way that participants described their experiences indicated positive changes in the flow of compassion. Participants wrote about increasing empathy towards others, and demonstrated an ability to adjust negative thinking towards others and themselves.

5. Self-awareness

Within Week Five staff members wrote about the impact of the content (*Opening to the Compassion of Others*) of the session on their understanding of themselves. Participants appeared to have experienced this in different ways, with some adopting a positive approach and others seeming to struggle with self-realisation.

6. Uncomfortable

Again at the end of Week Six participants wrote about challenges they were experiencing with practicing compassion, but unlike previous weeks the focus of the difficulties appeared to be related to their emotional experiences – in particular feeling uncomfortable – rather than the practical barriers. These feelings were more frequently written about in relation to difficult emotional experiences that arose in response to the self-compassion exercises (e.g. compassionate letter writing).

7. Continued Difficulty

In Week Seven participants wrote about continuing to experience difficulty with practicing compassion. This appeared to be specifically in relation to the self-critic exercise that was taught in the session. Staff members referenced both internal and external barriers (e.g. time, concentration, stress) to engaging with this exercise.

8. Determination

In the final week staff wrote about being determined to continue to develop their compassionate practice in order to bring about positive change within themselves. There was a sense that the participants took a wiser, more realistic approach to change in the final session as they wrote about continuous development and the importance of practice.

Week	1	2	3	4	5	6	7	8

Table 8. Table 8: Overarching themes identified in the end of session individual responses and the start of session group responses across all sessions

End of session review (Qualitative Questions)	Knowledge *developing knowledge of self, others and human species*	Value of Change *acknowledgement of need for change and sense of motivation to change*	Challenges *realisation that practicing compassion is challenging*	Progress *sense that practicing compassion is becoming more achievable*	Self-awareness *deeper understanding of own processes and of the reality of practicing compassion*	Uncomfortable *deeper understanding of compassion and of self has come with more challenges*	Continued Difficulty *continued difficulty with coming to terms with new insight into self*	Determination *dedication to the practice of compassion and sense of wiser approach to practice*
Start of Session review (Group Discussion)	Knowledge & Understanding *particular focus on the usefulness of the psychoeducation*		Practical Challenges *focus on the practical barriers to practicing compassion*		Compassionate Exercises *focus on the benefits and challenges of specific exercises*			
	Interactions, Relationships & Flow *focus on impact of others when practicing compassion and the more emphasis on the flow of compassion*							

Table 9. Corresponding quotes for the overarching themes identified in the data gathered from the individual responses at the end of each session

Overarching Theme	Corresponding Quotes
Knowledge	*"It was really helpful in consolidating the knowledge I already had"* *"The session consolidated information that I already knew but presented in such a way that went more into depth"* *"I understand more about how my brain works and that this is not my fault"* *"It has made me more aware of how the brain works and being stuck in a loop. It's something I haven't considered in the way this is presented and makes more sense"*
Value of Change	*"It has made me realise the imbalance in my systems and I feel like this has boosted my motivation to practice the exercises"* *"The course content is really interesting because it inspires that we can all make positive changes to have compassion in our lives."* *"I feel really relaxed and really motivated and keen to carry on with the exercises."*
Challenges	*"The exercises were more challenging and I felt I need more practice to find them easier."* *"Although positive the compassionate exercise was quite difficult to follow throughout its entirety."* *"The exercises this week were harder for me but… I can see how practicing could be really beneficial."*
Progress	*"I found the compassionate self exercises really helpful in terms of visualising the version of myself with commitment, wisdom and strength. It feels easier to imagine these things with practice."* *"The exercises were useful this week too as I followed these easily/getting used to the visual exercises."* *"The group discussions helped to see things from other people's view points and enable to readjust some of the negatives I had thought"* *"I felt I was doing it wrong although reflecting to myself there is no right/wrong way to imagine my compassionate self."*
Understanding	*"My understanding and awareness of myself in accepting*

	compassion from others has changed in a positive way." *"I have felt confused after today's session. I have realised things about myself for the first time and also realised that I want to change things about myself."* *"I have found the exercises in today's session really difficult. I believe this is an unwillingness to let people in/help me. I feel letting people in will make me feel vulnerable and weak. Realising I have barriers in place which stops me embracing compassion from others makes me feel quite sad."*
Uncomfortable	*"I found the letter writing quite profound – I have written letters like this to clients many times, but in writing to myself I felt quite anxious and uncomfortable"* *"It evoked a lot of feelings and some were quite difficult to process."* *"This week I found it difficult to do the exercises. I feel I need to practice these more to maybe feel comfortable with these."* *"More questions!! Does self-compassion sometimes compete with compassion to others? Does the letter writing potentially assuage you of responsibilities – and just make you feel better about what happened? Where does issue of responsibility lie? Is everything ok because we have 'tricky brains'?"*
Continued Difficulty	*"I found the exercises difficult to do. I will definitely practice throughout the week. I maybe found the exercise difficult as my self-critic is strong and there a lot of the time."* *"I found it difficult to do the image exercises. I struggled to focus and felt tired."*
Determination	*"Importance of practice and how to look forward re ongoing development of compassionate self."* *"I'm motivated by the intention to further develop my compassionate self."* *"Encouraged me to focus on the part of myself that I want to develop."* *"Looking forward to hopefully continuing to develop the practice."*

Group Discussions-start of session

The analysis of the group discussions at the start of each session revealed a less linear process than the data from the end of session qualitative questions (see Table 8 for themes and Table 10 for corresponding quotes). Clear themes were apparent for each of the eight weeks for the end of session data, whereas data collected from the start of session discussions revealed that multiple themes overlapped across several weeks. A further difference between the two data sets was a greater focus on the practicalities of practicing compassion in the group discussions compared to the end of session data where responses were more introspective. There was also a greater emphasis on relationships and the flow of compassion found within the group discussion data.

Weeks 1-2: Knowledge and Understanding

Across the first two weeks participants spoke at length about how the CMT was helping them to develop their knowledge and understanding of compassion and the human brain. In particular this was spoken about in relation to the psychoeducation that was included in these weeks.

Weeks 3-4: Practical Challenges

Between weeks 3-4 there was a focus on the practical barriers to practicing compassion. Participants spent much of the group discussions exploring practical reasons they were struggling to engage with the compassionate exercises. Although this is similar to the themes identified in the written responses, there was also a sense of motivation and progress shared by the participants which was not apparent within the group discussions.

Weeks 5-8: Compassionate Exercises

Throughout weeks 5-8 much of the group discussion was centred on the practice of the compassionate exercises. Participants spoke at length about both the benefits they were experiencing and the challenges they had encountered in relation to these exercises.

Weeks 2-7: Interactions, Relationships and Flow

Across weeks 2-7 the group discussions included a focus on the participants' interactions with others, including the benefits of the group discussions, and participants' relationships

outside of the CMT group. There was also a focus on the flow of compassion, both in being compassionate to others and in receiving compassion.

Table 10. Corresponding quotes for the overarching themes identified in the data gathered from the group responses at the start of each session

Overarching Theme	Corresponding Quotes
Weeks 1-2: Knowledge and Understanding	*"P: Yeah so we're all unique in our own way but we're all going through the same stuff aren't we. I find that quite comforting.* *F: Yeah, yeah. So there was comfort in learning about, was that sort of the old brain new brain stuff?* *P: Yeah, there's a reason why you're like this."* *"I suppose understanding or getting more information about the three systems that we started to explore last week. Getting a bit more of an understanding about what was going on for myself really."* *"when you have that awareness of what stimulates each system, I've started to notice when my threat system is firing and now I understand more what to do, I know that I need to trigger the other two systems more to try and balance them back out. Because we covered some of the stuff that gets the other two firing and it gave me a bit more of an idea what to do, about how to balance them out."*
Weeks 3-4: Practical Challenges	*"We were just talking before about routine, and about how when you're out of your routine it's a lot harder to do it."* *"I've found that when I have had a stressful week it's harder to be able to do it I think. My mind seems to wander more I think when I'm stressed and it takes quite a while for me to be able to do it."* *"I struggle with the compassionate ideal. I'm not sure why. There's, it's not that it doesn't feel effective or it doesn't relax you, I just struggle to hold the image or get the right image in my head."*
Weeks 5-8: Compassionate Exercises	*"It's helped me relate more to patients. I feel like being able to relate to that critic, and obviously it's not to the same extent but understanding that self-critic."* *F: So it's helped you with your clients? Has it helped you empathise with your clients, is that what you mean?* *P: Yeah with the empathy but also like treating people differently, like more matter of fact. Being more practical."* *"Because normally you get stuck on the criticism, and all you do is criticise yourself. Whereas in the letter, like you said you're*

	validating things." *"I think I struggled with the longer ones. I think a few people were saying that, you get to a point and you're thinking, oh but the time!"* *"Or even your own mindset sometimes like when I get back from work and I'm really tired. That's a biggy, or if I can't get work off my mind. And sometimes if I'm like that the imagery just has to kind of not happen"*
Weeks 2-7: Interactions, Relationships and Flow	*"I found the discussion at the start helpful actually, for thinking about how people have fitted it into their lives. You know, getting ideas from other people as well."* *"I still find it difficult to be compassionate to people who aren't compassionate to me."* *"I've had a really good week this week, I've been really kind of like happy and sometimes it's actually helped to calm things down because I've been getting on my husband and child's nerves."* *"I found the three circles thing quite helpful, more like if I was getting stressed or upset with someone, what do I do with it kind of thing?"*

Three Month Follow-up

A three month follow-up was arranged, however, due to personal circumstances and work demands only two participants attended. As a result, it was not possible to obtain reliable quantitative data for analysis. A group discussion was held with the two participants with regards to their experiences of practicing compassion since the end of the CMT group. Data was analysed using the thematic analysis process described previously. The identified themes were as follows (see Table 8 for corresponding quotes):

1. Work

Work was mentioned throughout the session by both participants. They spoke at length about work-related stress they were experiencing both in relation to its impact on their ability to practice compassion and to explain the various ways they had used what they had learnt from the group to manage this stress. Both participants also discussed positive experiences of sharing knowledge gained from the CMT group with colleagues and clients. They shared

instances of where they had used their own experiences of the CMT group to manage tensions at work, and to support the well-being of colleagues. Their experiences also seemed to have influenced their clinical work, both in improving their empathy and understanding towards distressed service users and more directly in sharing information learnt in the group with clients.

2. Change

Throughout the group discussion there was an emphasis on changes that the participants had experienced. Both staff members referred to the development of their beliefs and understanding of themselves and others as factors that enabled this change. This appeared to have brought about behavioural change, influencing how the participants managed situations. Indeed, both spoke about an increased capacity to cope, stemming from changes to their beliefs and behaviours.

Table 11. Corresponding quotes for the subthemes identified in the data gathered from the 3 month follow-up group responses

Theme	Subtheme	Quote
Work	Work-related Stress	*"I guess the stress of work, and not having the time either. It was both really. Because obviously time pressures were put on me which increases my stress levels which increases my anxiety"* *"I think like you, when the stress and anxiety has come up it really has been really difficult. I think the other barriers, I mean like you said there's work is definitely a big barrier. Like sometimes I'll be taking duty calls and trying to get on with doing my own work and you get home, and again tired and you just let everything drop"*
	Colleagues	*"You can see it in other people at work who are kind of like burning out and you try and like to you say to them you can't do it all."* *"Stop, take 5. Yeah I've found myself doing that with my colleagues when you see what's happening and you can see them unravelling in front of you you're like just stop, go for a walk whatever, it doesn't matter about work, work will always be there."* *"Well it's quite stressful at my place of work at the moment and there's a lot of warnings going on within the workplace and it's easy to see people being bullied and being victimised and it's about offering those people the time and the space to feel appreciated, show them some compassion and understanding and what you feel, but more importantly giving them the time to look to you and talk to you about what's going on and then trying to offer some sort of resolution, maybe trying to teach them some of the stuff, some of the exercises and trying to help them through."*
	Clients	*"I think the compassion comes in to where you start to understand why somebody is kicking off so they might be saying to you, you know social services is crap and you're not doing anything for me and you'd normally get defensive, you approach it in a different way and in the end I'm finding they're responding to me in a different way and they're a lot calmer."* *"I've been teaching them and making them more aware about compassion to themselves and that their situation isn't their own fault and that the anxiety and feelings they're experiencing isn't their fault, and giving them some bits of the psychoeducation that we've been taught"*
Change	Changes to Beliefs	*"it's the tricky brain stuff that you really take away so when you're thinking about the thoughts in your head and you must be the only one that gets all these thoughts in your head and these worries and concerns and everyone else around you seems to have it all in hand*

Theme	Subtheme	Quote
		and then you realise that actually people don't, your brain's tricky and all them things it makes you able to deal with it a bit better."
		"I think you just understand where the frustration comes from, it's the services it's not about us as individuals it's the services that have sent them round in circles and you're the one that's picked up the phone and gets, and they need to get that out. Once you understand that, actually yeah you are more compassionate."
		"when you do these kind of compassionate exercises and you have all the discussions with people like we've had in the group you do realise that actually we all need compassion, just because somebody is a manager they've got all their stresses and we just need to be careful that we're holding each other really."
	Behavioural Change	*"I can say to my family that, right I do need 5 minutes, don't disturb me for 5 minutes, and they are actually giving me that time now."*
		"It's nice just to have that time as well isn't it, just to go away, do your exercises and sort yourself out and come back clear and fresh and say ok, I like that it gives you that time to stop those feelings from coming up and taking over and you're addressing what's going on rather than ignoring it."
		"So yeah it has made a difference to how I think to everyone, like even those that I might not get on with it makes you kind of get that bit more effort to kind of engage them better whereas usually I would back off I might engage them a bit better maybe a bit more confidently as well"
	Capacity to Cope	*"So I think it's good to have it there because you can sort of bring yourself back whereas before you might have been in that sort of a lot longer before you could bring yourself back"*
		"I suppose just having done that course it means that you know you've got some tools, like you've got your tool box there to try and pick it up so it doesn't feel like you don't know what to do anymore"
		"It's easy to slide back in if you haven't got the awareness I think. Because I knew I was starting to slide and I was trying to stop myself from sliding back into the old habits. I think I did it. Well I'm still here! So I must have done something ok."

Discussion

This novel study appears to be the first attempt to identify the agents of change within group CMT. The results indicate that the group was effective in significantly reducing stress and increasing participants' abilities to self-soothe and accept compassion from others. Significant increases in self-compassion were also found. In relation to the agents of change, the findings suggest that both psychoeducation and the compassionate exercises play vital roles in initiating a willingness to, and optimism for, change; and instilling a deeper understanding of the practice of compassion.

Effectiveness of the CMT Group

The findings suggest that group CMT had an impact in reducing levels of depression, anxiety, stress and self-criticism, with a significant change being found for stress. It is possible that significant changes were not found for depression and anxiety because scores at pre-group were already lower than the test group norms. Significant increases were found for self-reassurance, suggesting participants were better able to self-soothe at the end of the group. Findings also indicate that the group positively impacted on participants' levels of self-compassion, and their ability to accept compassion from others, with significant increases found on the SCS and CEAS (Compassion to Self and Compassion from Others subscales). No significant change was found in participants' abilities to be compassionate towards others. As the majority of participants were healthcare professionals they may have had pre-existing high levels of compassion for others (Papadopoulos, 2016) which could explain this finding.

Agents of change - correlational data

The correlational results suggest a relationship between the psychoeducation element of the CMT group and positive changes in levels of stress and feelings of inadequacy amongst staff members. These findings indicate that holding in mind the psychoeducation was sufficient to reduce levels of stress and feelings of inadequacy, suggesting that the practice of compassionate exercises is not always necessary to bring about positive change. This is supported by the findings of the qualitative data, which indicated that psychoeducation had a positive impact on participants' understanding of themselves and others, whilst instilling a sense of optimism about the possibility of positive change. However, the qualitative data would also suggest that compassionate exercises are indeed helpful to enable a deeper understanding of what it actually means to practice compassion, implying that self-practice is

needed to fully engage with the flow of compassion. Combined, these findings suggest that psychoeducation alone can bring about some positive change, but that the experiential practice of compassion is important in facilitating meaningful change within the flow of compassion.

The correlations also indicated a positive relationship between the content of sessions 5 and 8 and changes on the pre and post outcome measures. This suggests that the participants who gave positive session ratings improved more on measures of stress and self-criticism than those who gave negative session ratings. However, correlation does not imply causation and therefore these findings should be interpreted with caution. The focus of these sessions were "opening to the compassion flow of others" (session 5) and "developing a compassionate mind" (session 8). Session 5 focused on compassion as a flow, developing the compassionate self and identifying fears of compassion. The qualitative data suggests that this session was important for increasing self-awareness, particularly in relation to identifying blocks to the flow of compassion. Session 8 focused on developing awareness and compassion of the many parts of the self. The qualitative feedback indicated that the multiple selves exercise in particular had a positive impact. The common themes in the content of these two sessions are a focus on developing self-compassion, and identifying and addressing fears and blocks to compassion. This is supported by the work of Gilbert and Mascaro (2017) who identify the impact of fears, blocks and resistances on engagement with compassion. These findings suggest that within CMT, psychoeducation and compassionate exercises relating to these two themes could be highly important for bringing about positive change.

Agents of change - qualitative data

- *Individual and group responses*

The findings indicate that psychoeducation in CMT is important for initiating the "contemplation" and "preparation" stages of the change process (Prochaska & DiClemente, 1983), through both educating participants about compassion and the human condition, and instilling a sense of optimism that positive changes can be made. This is in keeping with the 'attributes of compassion' (Gilbert, 2009) which emphasise the importance of motivation and empathy (i.e. understanding the suffering of others and ourselves) in developing compassion.

Secondly, it appears that experiential compassionate exercises enable a deeper, more realistic understanding of the practice of compassion. This suggests that self-practice is necessary to fully engage with compassion, and is important for the "action" and "maintenance" stages of

the change model (Prochaska & DiClemente, 1983). Again this supports Gilbert's CMT model as the evidence indicates that it is important to develop the 'skills of compassion' (i.e. compassionate reasoning, behaviour, attention, etc.) in order to actively engage in the practice of compassion.

- *Differences between individual and group responses*

Several differences were noted in the content of participants' contributions in the individual responses and the group discussions and therefore it is important to consider that they may have been serving different functions. Firstly, during the group discussions there was a greater focus on the practicalities of practicing compassion and on the group content. It is possible that after having a week to practice participants had identified challenges and barriers to compassion that may not have been apparent in the previous session. Furthermore, participants may have been eager to utilise the opportunity presented in the group discussions to ask the facilitator for advice regarding these challenges, and to seek validation from other group members. In contrast, the individual responses appeared to provide participants with the opportunity to consolidate the theory shared within the session, and to reflect on its impact on their understanding of themselves and others. It may be possible to draw links here with expressive writing (Pennebaker, Evans & Evans, 2014) which suggests that writing about important thoughts and feelings can reap significant emotional benefits (Baikie & Wilhelm, 2005). Taking this into consideration it is possible that the inclusion of written responses in the group design may have contributed to changes on the outcome measures. This was not, however, investigated by the current study and must therefore be interpreted with caution.

Within the group discussions there was also more time spent discussing the flow of compassion and participants' interactions with others outside of the group. It is possible that as the group was delivered in a classroom environment participants were only prompted to consider their interactions with others once they had been given the opportunity to put the content learned in sessions into practice.

Finally, less variation was found amongst the themes identified in the group discussions and the qualitative questions at the start and end of the group than in the middle. This suggests that participants' experiences of practicing compassion were changing in the period of time between sessions. It is possible that initially the content of the sessions appeared clear, but

when participants attempted to practice compassion outside of the group setting they encountered challenges.

Three Month Follow-up

The findings of the discussion held at the three-month follow-up indicated that both participants had continued to experience positive change after the CMT group ended. The staff members spoke about increased resilience brought about by changes in their beliefs and behaviours, suggesting that the positive impact of the group reported in the initial qualitative data was maintained after a 3-month period. Unfortunately, due to the small number of participants it was not possible to assess whether these positive effects would be reflected in participants' scores on the outcome measures. It is also important to consider that participants who attended the follow-up session may have had more positive overall experiences of the CMT group and may therefore have been more likely to provide positive feedback than those who did not attend. Therefore it is important to interpret the findings of the 3 month follow-up with caution.

Participants also discussed their experiences of sharing what they had learned with clients and colleagues in direct and indirect ways. The data indicated that group members were able to draw on their experiences of CMT within their clinical work to the benefit of service users and other staff members. This suggests that the CMT group may have encouraged "emotional contagion" (Totterdell, 2000) as group members appear to have spread the message and practice of compassion within their work environment (West, Eckert, Collins & Chowla, 2017). This has possible implications for healthcare providers as it suggests that the benefits of providing CMT groups for healthcare staff may reach beyond individual benefits, having a positive impact on staff teams and client care.

Feasibility of Methodology

Based on the above findings, it is possible to conclude that the methodology piloted in this study is appropriate for identifying the agents of change in group CMT. However, the results also suggest that improvements can be made. The findings suggest very little correlation between positive overall change and the group discussion element. Although the qualitative data suggest that participants found the group discussion useful for normalising difficulties with compassion and learning from others, it appears that it may be a vehicle of change rather than an active ingredient of CMT. It is also possible that the group acted as a basis for participants to absorb the compassionate content, but this was not recognised in participants'

ratings. This may, therefore, be a limitation of the measurement tool rather than the group format itself.

As the study found no substantial differences between the data collected from the quantitative questions administered at the end of sessions and those administered at the start of the following sessions it can be concluded that including both sets of outcome measures is not necessary. As lower scores were found on the questionnaires collected at the start of the following sessions after group members had chance to process the content of the previous week, it is recommended that these are used in future research.

Limitations

The findings of the study suggest promising results, however, it is acknowledged that the sample size was small and therefore more rigorous statistical testing was not possible. Furthermore, due to the number of statistical calculations there was an increased probability of a Type 1 error. As there was no matched control group an assumption is being made that reported changes over time are attributable to CMT group and not to other factors.

It is important to note that a statistical limitation of the analysis was that ratings were on 5-point Likert scales and for some ratings there was a very narrow spread of responses in the small sample. Thus correlations of such ratings with other variables are of limited value.

Furthermore, causation cannot be inferred from the results of the statistical analysis and therefore an assumption is being made that positive ratings on the Likert scales are indicative of an agent bringing about change. It is therefore possible that other factors may have influenced positive change on the pre- and post-measures which have not been captured in the current study. However, the evidence provided by the qualitative findings strengthens the evidence that sessions were important.

Lastly, no measure of therapeutic alliance was collected during the study. As research suggests that the alliance is the most effective predictor of therapeutic outcomes it is likely that this influenced the changes reported in the current study (Horvath & Symonds, 1991). Future research should include a measure of the therapeutic relationship and control for this within the analysis.

Future Research

As the methodology has been found, with the limitations highlighted, to be appropriate for identifying the agents of change within group CMT future research should focus on applying this method to randomised control trials with larger sample sizes. Furthermore, as the group discussion element was not found to be as effective in bringing about positive change, future studies may focus on the psychoeducation and compassionate exercises elements. A possible avenue for future research is a randomised control trial with four conditions; psychoeducation; compassionate exercises; psychoeducation and compassionate exercises; and waitlist control. Alternatively the methodology could also be applied to clinical populations. A further aspect to consider is regarding the role of the weekly individual reflections that were part of this pilot. It is possible that these played a role themselves in the change process. Groups with and without these could be compared to determine their importance. The methodology used could also be beneficial for group leaders as it provides feedback about how sessions are being perceived and processed by group members.

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Part Three

Appendices

Appendix A: Reflective Statement

Finding what Fits

When I started the clinical doctorate I was still dealing with the lasting effects of a period of depression I had experienced in the final year of my undergraduate course. Although at the time I felt stable I was living in constant apprehension that the low mood would return as it had done in the past, and once again I would be fighting against the effects of my own self-criticism. Around the same time I had a conversation with another trainee about a third-wave intervention I had not come across before: compassion focused therapy (CFT). I was instantly drawn to the relatively novel concept of self-compassion, and as someone with existing interests in mindfulness and Buddhist philosophy something seemed to click. The more I read about the compassion-focused approach the more I was able to make sense of my experiences with my own mental health, past and present. I believe that during this time I developed an understanding of what it means to be human that has equipped me to manage the challenge of staying mentally "well" in today's society, and an acceptance that this will always be a "work in progress". Based on my personal experiences with compassion-focused philosophy I knew that I wanted to contribute whatever I could to its evidence base, and to use the opportunity I had to spread the message of compassion.

When it came to choosing a specific area of research there appeared to be endless opportunities to investigate the effects of compassion for a wide range of populations. I remember feeling incredibly conflicted because there were so many ideas on the table and I wanted to do them all! This was a big surprise for me as my previous experience of research on my undergraduate course had not been positive, and I was very apprehensive about the doctoral thesis being such an important part of the clinical course. This really highlighted for me that when you have a genuine interest in the topic, research ceases to be such a daunting prospect. Having such a vested interest in the topic gave me the motivation to carry the research through from its initial conception to its completion.

After careful consideration of the options and taking into account my own interests I eventually decided that I wanted to focus my research on compassion-focused therapy for staff populations. Stemming from my undergraduate experiences of volunteering for a student support charity I had keen interests in compassion fatigue and burn out amongst individuals working in caring professions, and my experiences of placements within the NHS encouraged these interests. Initially I had been interested in adding to the evidence base for CFT by

evaluating the effectiveness of a CFT group for trainee clinical psychologists. However, as with most doctoral research, the first idea was not to be realised. After much deliberation the current study was decided on, which for me felt like the right balance between researching staff well-being whilst also contributing something new to the field of compassion.

Designing the Study

The methodology that was used in the research had never been tested before, hence the emphasis on the current thesis as a feasibility pilot study. This immediately triggered my self-criticism as although I had a new found enthusiasm for research, I still did not feel particularly competent and the thought of creating and carrying out a study using a novel design was more than enough to trigger my threat system. However, with time and careful guidance from my research supervisors I developed more confidence in my own capability, and completing the thesis slowly began to feel like something I could accomplish (although there was a lot of back and forth along the way!). I noticed that as the months went on I was feeling more confident in sharing my ideas within thesis meetings, and I felt comfortable making important decisions about the thesis.

Ethics Application

The ethics application process for me was a long one. As I was recruiting from a non-clinical population I needed to submit my application to the university ethics committee, but because I was sampling from a local NHS Trust an application also had to be made to the Trusts R&D department. This was a frustrating process as there was a lot of back and forth between myself and the committees and at this point I was eager to get started with recruitment. I was also aware that I needed to receive ethical approval well in advance of the deadline set by the course as the clinician who would be running the CMT group was shortly due to go on maternity leave. This added to the pressure of getting the study approved. In hindsight, I am actually grateful as it ensured that I had ample time to recruit participants, collect and analyse the data, and complete the study write-up without feeling particularly pressed for time.

Part way through the research it was decided that there would be time to carry out a three month follow-up study. This meant that I needed to submit a major amendment application to both the university ethics committee and the Trust R&D department. This understandably took time, which meant that there was limited opportunity to notify participants about the addition of the follow-up study. In future research I would make certain that any follow-up

studies were planned in advance and that participants were made aware of this from the start of the research to ensure maximum attendance.

Participant Recruitment

Contrary to reports from previous trainees I was fortunate enough to find participant recruitment relatively straight forward. Within a week of the recruitment email being sent I had a full set of participants. Although I had not anticipated any particular problems with recruitment as I was sampling from an NHS staff population, I was still shocked by the speed at which staff members had signed up to participate in the CMT group. For me this really highlighted the need for staff support within the organisation, and emphasised the open-mindedness of healthcare staff to engaging in group well-being programmes. The speed at which staff were recruited reassured me of the importance of the research and boosted my motivation to carry out the study.

I appreciate that another factor that likely contributed to the ease of the recruitment process for this study was that staff members were receiving something substantial in return for their participation. A free eight week training programme was likely a big draw for the participants and had this not been an intervention study I may have struggled to recruit as quickly as I did. This is something I will remember when designing future research as participant recruitment is often a significant barrier, and anything that can ethically aid the process is worth considering.

Data Analysis

Once the initial relief of having finished data collection had worn off I was left with the daunting task of data analysis. This was exacerbated by the sheer amount of information that had been gathered during the study. Beginning this task felt incredibly intimidating, but once I started I became hooked, particularly on the themes that were emerging from the qualitative data. For the first time I could honestly say that I was finding research exciting. That said, there were several points throughout the data analysis process where I found myself becoming side-tracked by the findings. There was a great deal of information that was very interesting but ultimately irrelevant to the research question and therefore it was not in the scope of the thesis to include it. I was conflicted about this as I found all of the qualitative data interesting, but I had to learn to stay focused on the original purpose of the study.

In relation to the qualitative data, I was pleasantly surprised by the detail that participants had shared within the individual responses and was often humbled by what they had written. When designing the study I had only thought of the individual responses as a means to an ends, a way of collecting the necessary information. However, throughout the course of the study it became apparent that the written responses themselves may have had a therapeutic effect in their own right. I had not considered that the research design could have this impact, and in future I hope to be more conscious of the effects the design of the study may have on participants' experiences. Furthermore, several of the individual responses were very emotive which again I had not anticipated. It felt like a privilege to be able to share part of the participants' compassionate journey, although the clinical psychologist in me struggled with not being able to hear more about these experiences.

Due to the mixed methods nature of the study I had to draw on a range of research skills, several of which I had little prior experience of using. Fortunately I had collected the data relatively early which left plenty of time for analysis. I was aware that the analysis would take a significant amount of time and therefore I began early. I quickly learned that I could not complete the analysis in the way that I usually prefer to work – sitting down and getting it all done in one go. Both with the quantitative and qualitative analyses I had to learn to take it one step at a time in order to limit the possibility of mistakes for the quantitative analysis and to thoroughly search for themes within the qualitative data. As clichéd as it sounds, this was a marathon not a sprint.

Possibly the aspect of the thesis I was most anxious about was the quantitative analysis. I had negative experiences with SPSS during my undergraduate degree and since then I had avoided statistics wherever possible. The prospect of using SPSS for my research thesis filled me with dread and I did not feel up to the task. However, with excellent support and guidance from a statistician I was able to navigate the challenges of SPSS with relative ease. I can honestly say that whilst I do not think I will ever enjoy statistics, my proudest moments whilst carrying out this thesis have been related to developing my SPSS skills and overcoming my fear of statistics.

As well as having worries about the statistics I was also concerned about carrying out the qualitative analysis. This was the first time I had engaged in any in depth qualitative research, and with this came a strong sense that I would "do it wrong". As someone whose only prior research experience had been using quantitative methods it felt bizarre to have so much

apparent power over identifying themes within the data, and I felt a keen pressure to accurately summarise what participants' were reporting. However, I knew that this was not possible and instead I tried to focus on thoroughly analysing the data and coming up with themes that were the best fit. This process got easier with time, made easier still by discussing the data analysis process during research meetings. By talking it through with other researchers it became more evident when a theme was not clear, or when there was overlap between multiple themes.

Report Writing

As with the data analysis the idea of having to somehow get everything down on paper was initially very daunting. However, once I started I realised that the hard bit had actually already been done. Again I came across the issue of having a lot of data, and again I had to be relatively ruthless about what needed to be included to answer the research question. Still, I had a lot to include and I came to appreciate the benefits of using tables and graphs to clarify and summarise findings.

Systematic Literature Review (SLR)

Whilst I was completing this portfolio thesis the SLR felt like an inconvenient distraction from my empirical research. I was made aware by previous trainees that this would be a large undertaking and was not something to be underestimated, so based on this advice I started work on the SLR relatively early in the hope that this would reduce the pressure of getting both papers completed in time. However, although I was very fortunate to have collected data for the empirical paper so early, this meant that I was trying to balance data analysis for the empirical paper and for the SLR at the same time. At the time it felt like they were both competing for my attention, and as I was already so invested in the empirical study I became quite resentful of the SLR for taking up valuable time.

Finding a topic for the SLR was probably the most infuriating part of the whole research process. Many ideas were considered but repeatedly I was finding that they had either already been done or that there was not enough evidence available for a literature review. It often felt like the process had been completed backwards, as due to the constraints of the doctorate course the empirical research had to be started prior to the SLR. At this point in the process I was becoming very frustrated and my self-critic was starting to get vocal again. In a particularly exasperating research meeting one of my supervisors suggested that I practice some self-compassion and recommended a CFT self-practice workbook. I took their advice

and after a few weeks I was regulating my systems again and able to continue searching for an SLR topic. Unsurprisingly, once I took a step back and accessed my soothing system I was able to find a topic with relative ease.

One aspect of the SLR that I struggled with most and still find uncomfortable was the critiquing of research conducted by other clinicians. This was compounded by the fact that these individuals were experts within the field and, furthermore, were people I looked up to and admired. Although I understand the importance of reviewing the quality of the available literature, I believe this is something that will remain uncomfortable for me for some time.

Although with time I came to appreciate the value that the SLR adds to my portfolio thesis, I cannot help but think of it as second to the empirical paper. Even writing this reflection now the SLR seems to be an afterthought compared to the process I went through with the empirical research. So, despite learning to acknowledge the qualities of SLRs I do not think that I will look forward to completing another one any time soon.

Summary

The whole process of completing this portfolio thesis has been exhausting, but not in the sense that I had initially expected. Going into it I saw the research as a means to an end, a necessary hoop to jump through in order to qualify as a clinical psychologist. However, as the process has played out I discovered that when you care about what you are researching, although it is still challenging, the process becomes less of a chore and more of an opportunity. I have learned a great deal throughout the process, both about the practicalities of research and the effect that research can have on the researcher and the participants themselves. All of this I hope to take with me into my future career where I will be looking for further research opportunities.

Appendix B: Epistemological Statement

Ontology is "concerned with the kinds of things that constitute the world" (Schwandt, 2001), and therefore our beliefs about *what* we know. Epistemology refers to "the study of the nature of knowledge and justification" (Schwandt, 2001), or rather our beliefs about *how* we can know about the world. Bracken (2010) emphasises the importance of ensuring that researchers reflect on their own ontological beliefs and epistemological stance as this will influence their selected methodology and their interpretation of data. The following statement attempts to reflect on the ontological and epistemological beliefs and assumptions that influenced the conception and completion of this thesis.

Qualitative and quantitative research methodologies are typically considered to be opposing inquiry paradigms that are underpinned by contrasting ontologies and epistemologies (Denzin & Lincoln, 2011). Qualitative research subscribes to the ontology of relativism, with a focus on exploring the constructed and co-constructed realities of individuals' experiences (Denzin & Lincoln, 2011). There is a transactional/subjectivist view that each individual's reality is created by their individual experiences. In contrast, positivism is the basis for quantitative research. Positivism refers to a belief that there is a single measurable and observable truth that can be uncovered by researchers (Merriam, 2002). Furthermore, the realist approach adopted in quantitative research assumes that for each problem there exists a solution, therefore placing emphasis on the cause and effect premise (Coomer, 1984).

Taking into account these two opposing paradigms, many researchers have concluded that the two are incompatible (Bryman, 1984). However, contrary to this view there are some who argue that a combination of research methods is often beneficial in answering the research question as each approach has its own advantages (Barnard, 2012). A pragmatist approach claims that answering the research question is more important than aligning with a specific epistemological stance (Ritchie, Lewis, Nicholls & Ormston, 2013). Mixed methods approaches have the advantage of combining the benefits of both qualitative and quantitative research methods to better address the research question (Johnson & Onwuegbuzie, 2004).

Reflecting on my own personal ontological and epistemological beliefs whilst conceptualising my portfolio thesis I found that I do not subscribe wholly to either a relativist or positivist approach. From exploring literature within the area of my thesis I noticed that each approach offers something beneficial to the research process, and that by using a combination of the two methodologies researchers may be better able to provide answers to complex research questions. Therefore, I found that the pragmatist approach best fits with my personal ideology.

As well as ensuring that the approach I adopted during the research process was in line with my own views, I was also conscious of selecting an approach that was driven by my research questions. The primary aim of the research was to identify the agents of change within a CMT group. In order to do this it was first necessary to assess whether participants reported any positive change after completion of the group, and therefore a quantitative approach was employed to test this. In order to access in depth information regarding participants' experiences of the CMT group and to develop an understanding of the agents of change it was important to utilise qualitative methods as this level of understanding would not have been possible through the sole use of quantitative methods.

To conclude, the current thesis is influenced by a pragmatic viewpoint which utilised the benefits of qualitative and quantitative methodologies to answer the research questions. I believe that without the combination of these methods it would not have been possible to attain the same level of understanding of the agents of change within group CMT.

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Appendix C: Author Guidelines for submission to *Psychology and Psychotherapy: Therapy, Research and Practice*

Psychology and Psychotherapy: Theory Research and Practice (formerly The British Journal of Medical Psychology) is an international scientific journal with a focus on the psychological aspects of mental health difficulties and well-being; and psychological problems and their psychological treatments. We welcome submissions from mental health professionals and researchers from all relevant professional backgrounds. The Journal welcomes submissions of original high quality empirical research and rigorous theoretical papers of any theoretical provenance provided they have a bearing upon vulnerability to, adjustment to, assessment of, and recovery (assisted or otherwise) from psychological disorders. Submission of systematic reviews and other research reports which support evidence-based practice are also welcomed, as are relevant high quality analogue studies and Registered Reports. The Journal thus aims to promote theoretical and research developments in the understanding of cognitive and emotional factors in psychological disorders, interpersonal attitudes, behaviour and relationships, and psychological therapies (including both process and outcome research) where mental health is concerned. Clinical or case studies will not normally be considered except where they illustrate particularly unusual forms of psychopathology or innovative forms of therapy and meet scientific criteria through appropriate use of single case experimental designs.

All papers published in Psychology and Psychotherapy: Theory, Research and Practice are eligible for Panel A: Psychology, Psychiatry and Neuroscience in the Research Excellence Framework (REF).

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

All articles submitted to PAPT must adhere to the stated word limit for the particular article type. The journal operates a policy of returning any papers that are over this word limit to the authors. The word limit does not include the abstract, reference list, figures and tables. Appendices however are included in the word limit. The Editors retain discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length (e.g., a new theory or a new method). The authors should contact the Editors first in such a case.

Word limits for specific article types are as follows:

- Research articles: 5000 words
- Qualitative papers: 6000 words
- Review papers: 6000 words
- Special Issue papers: 5000 words

3. Brief reports

These should be limited to 1000 words and may include research studies and theoretical, critical or review comments whose essential contribution can be made briefly. A summary of not more than 50 words should be provided.

4. Submission and reviewing

All manuscripts must be submitted via Editorial Manager. The Journal operates a policy of anonymous (double blind) peer review. We also operate a triage process in which submissions that are out of scope or otherwise inappropriate will be rejected by the editors without external peer review to avoid unnecessary delays. Before submitting, please read the terms and conditions of submission and the declaration of competing interests. You may also like to use theSubmission Checklist to help you prepare your paper. If you need more information about submitting your manuscript for publication, please email Vicki Pang, Editorial Assistant at papt@wiley.com or phone +44 (0) 1243 770 410.

By submitting a manuscript to or reviewing for this publication, your name, email address, and affiliation, and other contact details the publication might require, will be used for the regular operations of the publication, including, when necessary, sharing with the publisher (Wiley) and partners for production and publication. The publication and the publisher recognize the importance of protecting the personal information collected from users in the operation of these services, and have practices in place to ensure that steps are taken to maintain the security, integrity, and privacy of the personal data collected and processed. You can learn more athttps://authorservices.wiley.com/statements/data-protection-policy.html.

5. Manuscript requirements

• Contributions must be typed in double spacing with wide margins. All sheets must be numbered.

•Manuscripts should be preceded by a title page which includes a full list of authors and their affiliations, as well as the corresponding author's contact details. You may like to use this template. When entering the author names into Editorial Manager, the corresponding author will be asked to provide a CRediT contributor role to classify the role that each author played in creating the manuscript. Please see the Project CRediT website for a list of roles.

• The main document must be anonymous. Please do not mention the authors' names or affiliations (including in the Method section) and refer to any previous work in the third person.

• Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript but they must be mentioned in the text.

• Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use.

Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate sheet. The resolution of digital images must be at least 300 dpi. All figures must be mentioned in the text.

• For articles containing original scientific research, a structured abstract of up to 250 words should be included with the headings: Objectives, Design, Methods, Results, Conclusions. Review articles should use these headings: Purpose, Methods, Results, Conclusions.

• All Articles must include Practitioner Points – these are 2-4 bullet points, in addition to the abstract, with the heading 'Practitioner Points'. These should briefly and clearly outline the relevance of your research to professional practice.

• For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full and provide DOI numbers where possible for journal articles.

• SI units must be used for all measurements, rounded off to practical values if appropriate, with the imperial equivalent in parentheses.

• In normal circumstances, effect size should be incorporated.

• Authors are requested to avoid the use of sexist language.

• Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations, etc. for which they do not own copyright.

• Manuscripts describing clinical trials must be submitted in accordance with the CONSORT statement on reporting randomised controlled trials (http://www.consort-statement.org).

• Manuscripts describing systematic reviews and meta-analyses must be submitted in accordance with the PRISMA statement on reporting systematic reviews and meta-analyses (http://www.prisma-statement.org).

For guidelines on editorial style, please consult the APA Publication Manual published by the American Psychological Association.

6. Multiple or Linked submissions

Authors considering submitting two or more linked submissions should discuss this with the Editors in the first instance.

7. Supporting Information

PAPT is happy to accept articles with supporting information supplied for online only publication. This may include appendices, supplementary figures, sound files, videoclips etc. These will be posted on Wiley Online Library with the article. The print version will have a note indicating that extra material is available online. Please indicate clearly on submission which material is for online only publication. Please note that extra online only material is published as supplied by the author in the same file format and is not copyedited or typeset. Further information about this service can be found at http://authorservices.wiley.com/bauthor/suppmat.asp

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9. Colour illustrations

Colour figures may be published online free of charge; however, the journal charges for publishing figures in colour in print. If the author supplies colour figures at Early View publication, they will be invited to complete a colour charge agreement in RightsLink for Author Services. The author will have the option of paying immediately with a credit or debit card, or they can request an invoice. If the author chooses not to purchase colour printing, the figures will be converted to black and white for the print issue of the journal.

10. Pre-submission English-language editing

Authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. A list of independent suppliers of editing services can be found athttp://authorservices.wiley.com/bauthor/english_language.asp. All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

11. OnlineOpen

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13. The Later Stages

The corresponding author will receive an email alert containing a link to a web site. A working e-mail address must therefore be provided for the corresponding author. The proof can be downloaded as a PDF (portable document format) file from this site. Acrobat Reader will be required in order to read this file. This software can be downloaded (free of charge) from the following web site: http://www.adobe.com/products/acrobat/readstep2.html. This will enable the file to be opened, read on screen and annotated direct in the PDF. Corrections can also be supplied by hard copy if preferred. Further instructions will be sent with the proof. Hard copy proofs will be posted if no e-mail address is available. Excessive changes made by the author in the proofs, excluding typesetting errors, will be charged separately.

14. Early View

Psychology and Psychotherapy is covered by the Early View service on Wiley Online Library. Early View articles are complete full-text articles published online in advance of their publication in a printed issue. Articles are therefore available as soon as they are ready, rather than having to wait for the next scheduled print issue. Early View articles are complete and final. They have been fully reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after online publication. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so they cannot be cited in the traditional way. They are cited using their Digital Object Identifier (DOI) with no volume and issue or pagination information. E.g., Jones, A.B. (2010). Human rights Issues. *Human Rights Journal*. Advance online publication. doi:10.1111/j.1467-9299.2010.00300.x

Further information about the process of peer review and production can be found in this document. What happens to my paper? Appeals are handled according to the procedure recommended by COPE.

Appendix D: Data Extraction Form

General Information	
Title	
Author	
Year published	
Brief Summary of Study	
Participants	
Country	
Population	
Age	
Gender	
Sample size	
Methodology	
Aims	
Design	
Intervention	
Method of analysis	
Outcomes	
Attrition rates	
Outcome measures used	
Follow-up	
Control condition	
Conclusions	
Regarding main results	
Quality score	
Strengths/limitations	
Gaps for future research	

Appendix E: Quality checklist

Adapted from STROBE (Vandenbroucke et al., 2017) and Downs and Black (1998). The items have been colour coded to clarify which checklist they have been taken from.

Article Section	Item No.	Criteria	Yes	Partly	No	Unclear
			2	1	0	0
Introduction						
Background/rationale	1	Is the scientific background and rationale for the investigation explained?				
Objectives	2	Is the hypothesis/aim/objective clearly described?				
Methods						
Study design	3	Are key elements of study design presented? (E.g. type of design, methods, procedure, etc.)				
Setting	4	Are the settings, locations, and relevant dates (including periods of recruitment and data collection) described?				
Participants	5	Are the eligibility criteria, and the sources and methods of selection of participants clearly described?				
Sample	6	*(a)*Is it explained how the rationale for the study size was reached?				
		*(b)*Were the subjects asked to participate in the study representative of the entire population from which they were recruited?				
		Were the main outcome measures used accurate (valid and reliable)?				

Measures	7	
Outcomes	8	Are the main outcomes to be measured clearly described?
Statistical methods	9	(a)Are all statistical methods described? (b)Were the statistical tests used to assess the main outcome appropriate?
Results		
Participants	10	(a)Reports numbers of study – e.g. numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study and analysed. (b)Was compliance with the intervention reliable?
Descriptive data	11	Indicates number of participants with missing data for each variable of interest.
Main results	12	(a)Are the main findings clearly described? (b)Gives unadjusted estimates and, if applicable, cofounder-adjusted estimates and their precision (e.g. 95% confidence interval). Make clear which confounders were adjusted for and why they were included.
Discussion		
Key results	13	Summarises key results with

		reference to study objectives
Limitations	14	Discusses limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias.
Interpretation	15	Gives a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence.
Generalisability	16	Is the generalisability (external validity) of the study results discussed?
Totals		

Appendix F: Quality assessment summary table

Authors	Item																
	Introduction		Methods							Results			Discussion				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Anderson et al (2017)	2	2	2	1	1	0 (0+0)	2	2	3(1+2)	2(1+1)	0	4(2+2)	2	2	1	0	26/40
Clapton et al (2016)	2	2	2	1	2	0 (0+0)	1	2	4(2+2)	3(1+2)	0	2(2+0)	2	2	2	2	29/40
Collins et al (2018)	2	2	1	2	2	0 (0+0)	2	2	4(2+2)	3(1+2)	2	2(2+0)	2	2	2	1	31/40
Cuppage et al (2017)	2	2	2	1	2	0 (0+0)	2	2	4(2+2)	3(1+2)	1	2(2+0)	2	2	2	0	29/40
Gilbert et al (2006)	2	2	1	1	1	0 (0+0)	2	2	4(2+2)	3(1+2)	0	2(2+1)	2	1	2	0	26/40
Herriot-Maitland et al (2014)	2	2	2	1	2	0 (0+0)	0	2	4(2+2)	2(1+1)	2	2(2+1)	2	2	2	2	30/40
Laithwaite et al (2009)	2	2	2	1	2	0 (0+0)	2	2	4(2+2)	1(1+0)	0	2(2+0)	2	2	2	1	27/40
Lucre et al (2017)	2	2	2	1	1	0(0+0)	2	2	4(2+2)	3(1+2)	0	2(2+0)	2	2	2	1	26/40
Judge et al (2012)	2	2	2	1	1	0(0+0)	2	2	4(2+2)	3(1+2)	0	2(2+0)	2	1	2	0	26/40
McManus et al (2018)	2	2	1	1	1	0(0+0)	2	2	4(2+2)	1(1+0)	0	2(2+0)	2	1	2	0	23/40
Neff et al (2012)	2	2	2	1	1	0(0+0)	2	2	4(2+2)	2(1+1)	0	2(2+1)	2	2	2	2	29/40
Noorbala et al (2013)	2	2	2	1	1	0(0+0)	2	2	4(2+2)	1(1+0)	0	2(2+0)	2	2	2	0	25/40

Appendix G: Confirmation of ethical approval

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w: www.hull.ac.uk

PRIVATE AND CONFIDENTIAL
Alexandra Askew
Faculty of Health Sciences
University of Hull
Via email

5th April, 2018

Dear Alexandra,

REF FHS – 039 Agents of Change in a Staff Compassionate Mind Training Group

Thank you for your responses to the points raised by the Faculty of Health Sciences Research Ethics Committee.

Given the information you have provided I confirm approval by Chair's action.

Please refer to the Research Ethics Committee web page for reporting requirements in the event of subsequent amendments to your study.

I wish you every success with your study.

Yours sincerely

Professor Liz Walker
Chair, FHS Research Ethics Committee

UNIVERSITY OF HULL

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Appendix H: Recruitment email

Staff wellbeing

Are you….

- *Too busy*
- *Stressed*
- *Juggling too much*
- *Struggling to keep up with the increasing demands*
- *Wondering if the NHS can be what it should*
- *Feeling disconnected with your values*
- *Criticising yourself*
- *Criticising those around you*
- *Feeling disillusioned*

…if you feel like this some or all of the time, then it sounds like you're a caring human being working in the NHS!

When times are at their most challenging, compassion can become more difficult, yet even more necessary to help us navigate all the suffering that is around us. A staff group is being offered to help you slow down, develop skills of mindfulness and introduce you to the theory, motivation and practice of developing a compassionate mind.

The Compassion Focused Therapy (CFT) approach is based on neuropsychology, the theory of evolution and attachment, and uses principles of meditation and Buddhist psychology. CFT offers us a framework of understanding our brain, emotions, and bodies; and it offers us a set of skills that can guide us towards what is helpful to us.

If you are curious to learn more, wish to work on reconnecting with your values, and to develop your compassionate mind for the benefit of yourself and others, then you may be interested in the 12 week course. The course will start in May 2018 facilitated by Dr Ashleigh McLellan, Clinical Psychologist. More information outlining the course and how to apply can be found here or on the attachment to this email.

Appendix I: Participant information sheet

Title of the study: Agents of Change in a Staff Compassionate Mind Training Group

We would like to invite you to take part in our research study which is looking at the agents of change in a Compassionate Mind Training group for staff (i.e. what makes it work?). Before you decide if you want to participate we would like you to understand why this research is being done. We would also like you to understand what it will involve for you if you decide to participate. You can talk to others if you would like before you decide if you want to take part. ***The researcher will answer any questions you may have.***

What is the purpose of the study?

We know that Compassionate Mind Training can be effective in increasing levels of contentment, self-compassion, self-acceptance and confidence; and decreasing levels of stress, anxiety, self-criticism and feeling down. However, we do not know which elements of the training are the most effective in eliciting these changes. Therefore we are looking to gather information which will help us to better understand what makes Compassionate Mind Training effective.

A little more about the Compassionate Focused Approach

Compassionate Mind Training was developed by Professor Paul Gilbert from over 30 years of research into why some clients suffering from depression were not benefiting from traditional therapies. Clients would describe how they could see the logic in apparently encouraging and reassuring evidence, but they just did not *"feel"* or believe it. Compassionate Mind Training draws from many fields of understanding including evolutionary science, neuroscience and psychology to suggest that for such people the system which helps us feel reassured (the "soothing" or affiliative system) has not been sufficiently developed to allow us to self-soothe and to better engage with that which we find threatening. Threat may come from our environment in the form of work pressures, criticism or lack of support from others for example, or from ourselves in the form of self-criticism or shame for example. Our threat system responds by creating feelings of anxiety, anger (and also disgust) within us.

We now know that we can "train up" parts of our brain through stimulation and exercise just like training up our body in the gym or through physiotherapy. The Compassionate Mind Training aspect of Compassion Focused Therapy provides multiple ways of training up our soothing system so that it has the capacity to engage with and calm our threat system. (See Gilbert P., The Compassionate Mind (2009). Constable)

Why have I been invited?

This information is being sent to all staff members of the Humber NHS Foundation Trust. If you are a member of this Trust then you fulfil the criteria for the study and you may find it interesting or useful.

Do I have to take part?
No, participation is completely voluntary. If you decide to take part you will be asked to sign a consent form to indicate that you agree to take part. You are free to withdraw from the study up to the point where the study results are analysed and written up and you do not have to give a reason for this. Your decision will not affect your medical care or your legal rights.

What will happen if I decide to take part?
Please email your name, job title, work base and the name of the manager with whom you have agreed your participation in the group to lwood10@nhs.net with subject title '*CMT for staff*' who will send them to the course trainer. The programme will provide two hours of formal training every week in small groups of 15 participants. Participants would be required to commit to attending all 8 sessions and to undertake self-practice of Compassionate Mind exercises for at least 1 to 10 minutes per day during the 8 weeks. During each session you will be asked to participate in a group discussion of how you are finding the content you are being taught. You will also be asked to fill out short questionnaires each session on your experiences of the group content.

What are the possible disadvantages and risks of taking part?
Participating in this study will require you to commit to 2 hour sessions every week for 8 weeks, and to undertake self-practice of Compassionate techniques. This is a significant amount of time to commit, and may be inconvenient for you. Some people may experience distress during the sessions. Should this happen the group facilitator will offer support and help you to gain access to further help if needed.

What are the possible benefits of taking part?
You will be receiving 8 sessions of group Compassionate Mind Training at no monetary cost. Participants might notice personal benefits in terms of increases in contentment, self-compassion, self-acceptance and confidence; and decreases in levels of stress, anxiety, self-criticism and feeling down. It is also hoped that the information you give us will help us to understand more about Compassion Focused Therapy and how it works, which may help to improve its implementation in services in the future.

What will happen if I decide I no longer wish to take part?
You are free to withdraw from the study before the results are analysed and the study is written-up without giving a reason. However, any contributions that you make in the group discussions cannot be withdrawn from the study. This will not affect your legal rights or the medical care that you receive.

What if there is a problem?
If you have a concern about the study you can contact the researcher or their supervisor who will do their best to answer your questions.

Will my taking part in this study be kept confidential?

Yes, all the personal information that you provide will be kept strictly confidential. Any information that could be used to identify you will not be used in the research. The people who decide to participate will be given a code to protect their anonymity. After the research is completed all the audio recordings will be destroyed. The questionnaires will be stored in secure cabinets on University of Hull premises for 10 years before being destroyed. The only time that information cannot be kept confidential is if you disclose something that suggests that you or someone else is at risk of serious harm. If this happens during the group the researcher will need to contact appropriate authorities to ensure that you and other people are safe. It is unlikely that this will happen and the group facilitator will try to discuss this with you.

What will happen to the results of the study?

After the study is completed if you wish you will be given written feedback about the results of the study. Then the results will be written-up and submitted for publication in an academic journal. Some direct quotes from the group discussions may be used in the write-up. Your personal details and any identifiable data **will not** be included in the write-up.

Who is organising and funding the research?

This research is being undertaken as part of a doctoral research project in Clinical Psychology. The research is funded and regulated through the University of Hull. Some relevant sections of data collected during the study which are relevant to taking part in this research may be looked at by responsible individuals from the University of Hull or from regulatory authorities to ensure that appropriate guidance was followed by the researcher.

Who has reviewed the study?

The study is reviewed by an independent organisation which is called a Research Ethics Committee. The Research Ethics Committee protects the interest of people who participate in research. This study has been reviewed by the Faculty of Health Sciences Ethics Committee at the University of Hull and been given a favourable opinion.

If you have any further questions, comments or queries, please don't hesitate to contact Alexandra Askew. Thank you for taking the time to read this information.

Yours Sincerely,

Alexandra Askew
Trainee Clinical Psychologist

Supervised by,

Dr Philip Molyneux
Clinical Psychologist

Dr Tim Alexander
Research Coordinator

Further information and contact details

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Thank you very much for your interest!

Appendix J: Participant consent form

Title of Project: Agents of Change in a Staff Compassionate Mind Training Group

Name of Researcher: Alexandra Askew

Please initial all boxes

1. I confirm that I have read and understand the information sheet dated 05.10.2018 (Version 2) for the above study. I have had the opportunity to consider the information. If I had any questions, they have been answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason up to the point of data analysis and transcription, without my pay or employment being affected. ☐

3. I confirm that direct quotes from the group discussions may be used in future publications and understand that they will be anonymised. I understand that any contributions that I may make during the audio recorded group discussions cannot be withdrawn. ☐

4. I understand that data collected during the study may be looked at by individuals from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. ☐

5. I agree to take part in the group discussions and understand that my contributions will be audio recorded. ☐

6. I agree to complete the questionnaires used in this study. ☐

7. I agree to take part in a 3 month follow up session. I understand that this will involve a group discussion that will be audio recorded, and completion of the questionnaires used previously in the study. ☐

8. I agree to take part in the above study. ☐

Name of participant	Date	Signature
_____	_____	_____
Name of person taking consent	Date	Signature
_____	_____	_____

Appendix K: Participant information sheet (3 month follow-up)

Title of the study: Agents of Change in a Staff Compassionate Mind Training Group – 3 Month Follow Up

We would like to invite you to take part in a 3 month follow up of the research study you took part in which looked at the agents of change in a Compassionate Mind Training group for staff. Before you decide if you want to participate we would like you to understand why this follow up is being done. We would also like you to understand what it will involve for you if you decide to participate. You can talk to others if you would like before you decide if you want to take part. ***The researcher will answer any questions you may have.***

What is the purpose of the 3 month follow up?
The original study looked at which elements of the of Compassionate Mind Training are the most effective in eliciting change in levels of self-compassion, self-acceptance and confidence; and of stress, anxiety, self-criticism and feeling down. However, we do not know if these effects are maintained over time. Therefore we are looking to gather information which will help us to better understand the longitudinal effects of Compassionate Mind Training.

Why have I been invited?
This information is being sent to all staff members who took part in the original study which looked at the agents of change in a Compassionate Mind Training group for staff.

Do I have to take part?
No, participation is completely voluntary. If you decide to take part you will be asked to sign a consent form to indicate that you agree to take part. You are free to withdraw from the follow up study up to the point where the study results are analysed and written up, and you do not have to give a reason for this. Your decision will not affect your pay or employment.

What will happen if I decide to take part?
Please email your name to the group facilitator (ashleighmclellan@nhs.net) with the subject title *'CMT for Staff'*. The follow up will involve a group discussion with the other staff members who took part in the original study. The discussion will last approximately one hour and will be held at Victoria House. The discussion will be audio recorded. You will also be asked to complete the questionnaires from the original study. After this, the group facilitator will be offering an optional "refresher" of some of the theory and exercises from the Compassionate Mind Training group.

What will happen if I decide I no longer wish to take part?
You are free to withdraw from the study before the results are analysed and the study is written-up without giving a reason. However, any contributions that you make in the group discussion cannot be withdrawn from the study. This will not affect your legal rights or the medical care that you receive.

What if there is a problem?
If you have a concern about the study you can contact the researcher or their supervisor who will do their best to answer your questions.

Will my taking part in this study be kept confidential?
Yes, all the personal information that you provide will be kept strictly confidential. Any information that could be used to identify you will not be used in the research. The people who decide to participate will be given a code to protect their anonymity. After the research is completed the audio recording will be destroyed. The questionnaires will be stored in secure cabinets on University of Hull premises for 10 years before being destroyed. The only time that information cannot be kept confidential is if you disclose something that suggests that you or someone else is at risk of serious harm. If this happens during the group the researcher will need to contact appropriate authorities to ensure that you and other people are safe. It is unlikely that this will happen and the group facilitator will try to discuss this with you.

What will happen to the results of the study?
After the study is completed if you wish you will be given written feedback about the results of the study. Then the results will be written-up and submitted for publication in an academic journal. Some direct quotes from the group discussions may be used in the write-up. Your personal details and any identifiable data **will not** be included in the write-up.

Who is organising and funding the research?
This research is being undertaken as part of a doctoral research project in Clinical Psychology. The research is funded and regulated through the University of Hull. Some relevant sections of data collected during the study which are relevant to taking part in this research may be looked at by responsible individuals from the University of Hull or from regulatory authorities to ensure that appropriate guidance was followed by the researcher.

Who has reviewed the study?
The study is reviewed by an independent organisation which is called a Research Ethics Committee. The Research Ethics Committee protects the interest of people who participate in research. This study has been reviewed by the Faculty of Health Sciences Ethics Committee at the University of Hull and been given a favourable opinion.

If you have any further questions, comments or queries, please don't hesitate to contact Alexandra Askew. Thank you for taking the time to read this information.

Yours Sincerely,

Alexandra Askew
Trainee Clinical Psychologist

Supervised by,

Dr Philip Molyneux
Clinical Psychologist

Dr Tim Alexander
Research Coordinator

Further information and contact details

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Thank you very much for your interest!

Appendix L: Participant consent form (3 month follow-up)

Title of Project: Agents of Change in a Staff Compassionate Mind Training Group – 3 Month Follow Up

Name of Researcher: Alexandra Askew

Please initial all boxes

1. I confirm that I have read and understand the information sheet dated 05.10.2018 (Version 2) for the above study. I have had the opportunity to consider the information. If I had any questions, they have been answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason up to the point of data analysis and transcription, without my pay or employment being affected. ☐

3. I confirm that direct quotes from the audio recorded group discussion may be used in future publications and understand that they will be anonymised. I understand that any contributions that I may make during the group discussion cannot be withdrawn. ☐

4. I understand that data collected from the 3 month follow up study may be looked at by individuals from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. ☐

5. I agree to take part in the above 3 month follow up study. ☐

Name of participant	Date	Signature
_____	_____	_____
Name of person taking consent	Date	Signature
_____	_____	_____

Appendix M: Depression Anxiety and Stress Scale

DASS21

Name: Date:

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you **over the past week**. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree or a good part of time
3 Applied to me very much or most of the time

1 (s)	I found it hard to wind down	0	1	2	3
2 (a)	I was aware of dryness of my mouth	0	1	2	3
3 (d)	I couldn't seem to experience any positive feeling at all	0	1	2	3
4 (a)	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5 (d)	I found it difficult to work up the initiative to do things	0	1	2	3
6 (s)	I tended to over-react to situations	0	1	2	3
7 (a)	I experienced trembling (e.g. in the hands)	0	1	2	3
8 (s)	I felt that I was using a lot of nervous energy	0	1	2	3
9 (a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10 (d)	I felt that I had nothing to look forward to	0	1	2	3
11 (s)	I found myself getting agitated	0	1	2	3
12 (s)	I found it difficult to relax	0	1	2	3
13 (d)	I felt down-hearted and blue	0	1	2	3
14 (s)	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15 (a)	I felt I was close to panic	0	1	2	3
16 (d)	I was unable to become enthusiastic about anything	0	1	2	3
17 (d)	I felt I wasn't worth much as a person	0	1	2	3
18 (s)	I felt that I was rather touchy	0	1	2	3
19 (a)	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20 (a)	I felt scared without any good reason	0	1	2	3
21 (d)	I felt that life was meaningless	0	1	2	3

Appendix N: Forms of Self-Criticising/Attacking and Self-Reassuring Scale

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THE FORMS OF SELF-CRITICISING/ATTACKING &

SELF-REASSURING SCALE (FSCRS)

When things go wrong in our lives or don't work out as we hoped, and we feel we could have done better, we sometimes have *negative and self-critical thoughts and feelings.* These may take the form of feeling worthless, useless or inferior etc. However, people can also try to be supportive of them selves. Below are a series of thoughts and feelings that people sometimes have. Read each statement carefully and circle the number that best describes how much each statement is true for you.

Please use the scale below.

Not at all like me 0	A little bit like me 1	Moderately like me 2	Quite a bit like me 3	Extremely like me 4

When things go wrong for me:

1.	I am easily disappointed with myself.	0	1	2	3	4
2.	There is a part of me that puts me down.	0	1	2	3	4
3.	I am able to remind myself of positive things about myself.	0	1	2	3	4
4.	I find it difficult to control my anger and frustration at myself.	0	1	2	3	4
5.	I find it easy to forgive myself.	0	1	2	3	4
6.	There is a part of me that feels I am not good enough.	0	1	2	3	4
7.	I feel beaten down by my own self-critical thoughts.	0	1	2	3	4
8.	I still like being me.	0	1	2	3	4
9.	I have become so angry with myself that I want to hurt or injure myself.	0	1	2	3	4
10.	I have a sense of disgust with myself.	0	1	2	3	4
11.	I can still feel lovable and acceptable.	0	1	2	3	4
12.	I stop caring about myself.	0	1	2	3	4
13.	I find it easy to like myself.	0	1	2	3	4
14.	I remember and dwell on my failings.	0	1	2	3	4
15.	I call myself names.	0	1	2	3	4

1

16.	I am gentle and supportive with myself.	0	1	2	3	4
17.	I can't accept failures and setbacks without feeling inadequate.	0	1	2	3	4
18.	I think I deserve my self-criticism.	0	1	2	3	4
19.	I am able to care and look after myself.	0	1	2	3	4
20.	There is a part of me that wants to get rid of the bits I don't like.	0	1	2	3	4
21.	I encourage myself for the future.	0	1	2	3	4
22.	I do not like being me.	0	1	2	3	4

Appendix O: Self-Compassion Scale

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost never				Almost always
1	2	3	4	5

_____ 1. I'm disapproving and judgmental about my own flaws and inadequacies.

_____ 2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.

_____ 3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.

_____ 4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.

_____ 5. I try to be loving towards myself when I'm feeling emotional pain.

_____ 6. When I fail at something important to me I become consumed by feelings of inadequacy.

_____ 7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.

_____ 8. When times are really difficult, I tend to be tough on myself.

_____ 9. When something upsets me I try to keep my emotions in balance.

_____ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

_____ 11. I'm intolerant and impatient towards those aspects of my personality I don't like.

_____ 12. When I'm going through a very hard time, I give myself the caring and tenderness I need.

_____ 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.

_____ 14. When something painful happens I try to take a balanced view of the situation.

_____ 15. I try to see my failings as part of the human condition.

_____ 16. When I see aspects of myself that I don't like, I get down on myself.

_____ 17. When I fail at something important to me I try to keep things in perspective.

_____ 18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.

_____ 19. I'm kind to myself when I'm experiencing suffering.

_____ 20. When something upsets me I get carried away with my feelings.

_____ 21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.

_____ 22. When I'm feeling down I try to approach my feelings with curiosity and openness.

_____ 23. I'm tolerant of my own flaws and inadequacies.

_____ 24. When something painful happens I tend to blow the incident out of proportion.

_____ 25. When I fail at something that's important to me, I tend to feel alone in my failure.

_____ 26. I try to be understanding and patient towards those aspects of my personality I don't like.

THE Compassionate Mind FOUNDATION

THE COMPASSIONATE ENGAGEMENT AND ACTION SCALES

Self-compassion

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, we may cope with these in different ways. We are interested in the degree to which people can **be compassionate with themselves**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful to us. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you if you become distressed. Please rate the items using the following rating scale:

Never **Always**
1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you are, and able to engage with distress when you experience it. So:

When I'm distressed or upset by things…

1. I am *motivated* to engage and work with my distress when it arises.
Never **Always**
1 2 3 4 5 6 7 8 9 10

2. I *notice,* and am *sensitive* to my distressed feelings when they arise in me.
Never **Always**
1 2 3 4 5 6 7 8 9 10

(r)3. I avoid thinking about my distress and try to distract myself and put it out of my mind.
Never **Always**
1 2 3 4 5 6 7 8 9 10

4. I am *emotionally moved* by my distressed feelings or situations.
Never **Always**
1 2 3 4 5 6 7 8 9 10

5. I *tolerate* the various feelings that are part of my distress.
Never **Always**
1 2 3 4 5 6 7 8 9 10

Appendix P: The Compassionate Engagement and Action Scales

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6. I *reflect on* and *make sense* of my feelings of distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)7 I do not tolerate being distressed.

Never **Always**

1 2 3 4 5 6 7 8 9 10

8. I am *accepting, non-critical and non-judgemental* of my feelings of distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 2 – These questions relate to how you actively cope in compassionate ways with emotions, thoughts and situations that distress you. So:

When I'm distressed or upset by things…

1. I direct my *attention* to what is likely to be helpful to me.

Never **Always**

1 2 3 4 5 6 7 8 9 10

2. I *think* about and come up with helpful ways to cope with my distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)3. I don't know how to help myself.

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. I take the *actions* and do the things that will be helpful to me.

Never **Always**

1 2 3 4 5 6 7 8 9 10

5. I create inner feelings of *support, helpfulness and encouragement*.

Never **Always**

1 2 3 4 5 6 7 8 9 10

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

THE Compassionate Mind FOUNDATION

Compassion to others

When things go wrong for other people and they become distressed by setbacks, failures, disappointments or losses, we may cope with their distress in different ways. We are interested in the degree to which people can be **compassionate to others**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you when **people in your life** become distressed. Please rate the items using the following rating scale:

Never **Always**
1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you are, and able to engage with other people's distress when they are experiencing it. So:

When others are distressed or upset by things…

1. I am *motivated* to engage and work with other peoples' distress when it arises.
Never **Always**
1 2 3 4 5 6 7 8 9 10

2. I *notice* and *am sensitive* to distress in others when it arises.
Never **Always**
1 2 3 4 5 6 7 8 9 10

(r)3. I avoid thinking about other peoples' distress, try to distract myself and put it out of my mind.
Never **Always**
1 2 3 4 5 6 7 8 9 10

4. I am *emotionally moved* by expressions of distress in others.
Never **Always**
1 2 3 4 5 6 7 8 9 10

5. I *tolerate* the various feelings that are part of other people's distress.
Never **Always**
1 2 3 4 5 6 7 8 9 10

THE Compassionate Mind FOUNDATION

6. I *reflect on* and *make sense* of other people's distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)7 I do not tolerate other peoples' distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

8. I am *accepting, non-critical and non-judgemental* of others people's distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 2 – These questions relate to how you actively respond in compassionate ways when other people are distressed. So:

When others are distressed or upset by things…

1. I direct *attention* to what is likely to be helpful to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

2. I *think about and come up* with helpful ways for them to cope with their distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)3. I don't know how to help other people when they are distressed.

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. I take the *actions* and *do the things* that will be helpful to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

5. I express feelings of *support, helpfulness and encouragement* to others.

Never **Always**

1 2 3 4 5 6 7 8 9 10

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

THE Compassionate Mind FOUNDATION

Compassion from others

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, others may cope with our distress in different ways. We are interested in the degree to which you feel that **important people in your life can be compassionate to your distress**. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The *second* aspect of compassion is the ability to focus on what is helpful to us or others. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to the **important people in your life** when you become distressed. Please rate the items using the following rating scale:

Never **Always**
1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you think others are, and how much they engage with your distress when you experience it. So:

When I'm distressed or upset by things…

1. Other people are actively *motivated* to engage and work with my distress when it arises.

Never **Always**
1 2 3 4 5 6 7 8 9 10

2. Others *notice* and *are sensitive* to my distressed feelings when they arise in me.

Never **Always**
1 2 3 4 5 6 7 8 9 10

(r)3 Others avoid thinking about my distress, try to distract themselves and put it out of their mind.

Never **Always**
1 2 3 4 5 6 7 8 9 10

4. Others are *emotionally moved* by my distressed feelings.

Never **Always**
1 2 3 4 5 6 7 8 9 10

5. Others *tolerate* my various feelings that are part of my distress.

Never **Always**
1 2 3 4 5 6 7 8 9 10

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6. Others *reflect on* and *make sense* of my feelings of distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)7. Others do not tolerate my distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

8. Others are *accepting, non-critical and non-judgemental* of my feelings of distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 2 – These questions relate to how others actively cope in compassionate ways with emotions and situations that distress you. So:

When I'm distressed or upset by things…

1. Others direct their *attention* to what is likely to be helpful to me.

Never **Always**

1 2 3 4 5 6 7 8 9 10

2. Others *think about* and come up with helpful ways for me to cope with my distress.

Never **Always**

1 2 3 4 5 6 7 8 9 10

(r)3. Others don't know how to help me when I am distressed

Never **Always**

1 2 3 4 5 6 7 8 9 10

4. Others take the *actions* and do the things that will be helpful to me.

Never **Always**

1 2 3 4 5 6 7 8 9 10

5. Others treat me with feelings of *support, helpfulness and encouragement*.

Never **Always**

1 2 3 4 5 6 7 8 9 10

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

Appendix Q: End of session measures

Thinking about today's session, please rate the following:	VERY NEGATIVE	NEGATIVE	NO IMPACT	POSITIVE	VERY POSITIVE
What impact has the psychoeducation had on you?					

	VERY NEGATIVE	NEGATIVE	NO IMPACT	POSITIVE	VERY POSITIVE
What impact has the group discussion had on you?					

	VERY NEGATIVE	NEGATIVE	NO IMPACT	POSITIVE	VERY POSITIVE
What impact have the compassionate exercises had on you?					

What impact has today's session had on you?

Appendix R: Start of session measures

The last session included psychoeducation, group discussion and compassion exercises.

Thinking about the last session and the time since then please answer the following questions:

1. Psychoeducation

	VERY NEGATIVE	NEGATIVE	NO IMPACT	POSITIVE	VERY POSITIVE
What impact has it had?					

	NOT AT ALL	ONCE OR TWICE	THREE OR FOUR TIMES	FIVE-SIX TIMES	EVERYDAY
How much have you used it?					

	VERY DIFFICULT	DIFFCIULT	OK	EASY	VERY EASY
How have you found using it?					

2. Group Discussion

	VERY NEGATIVE	NEGATIVE	NO IMPACT	POSITIVE	VERY POSITIVE
What impact has it had?					

3. Compassionate Exercises

	VERY NEGATIVE	NEGATIVE	NO IMPACT	POSITIVE	VERY POSITIVE
What impact has it had?					

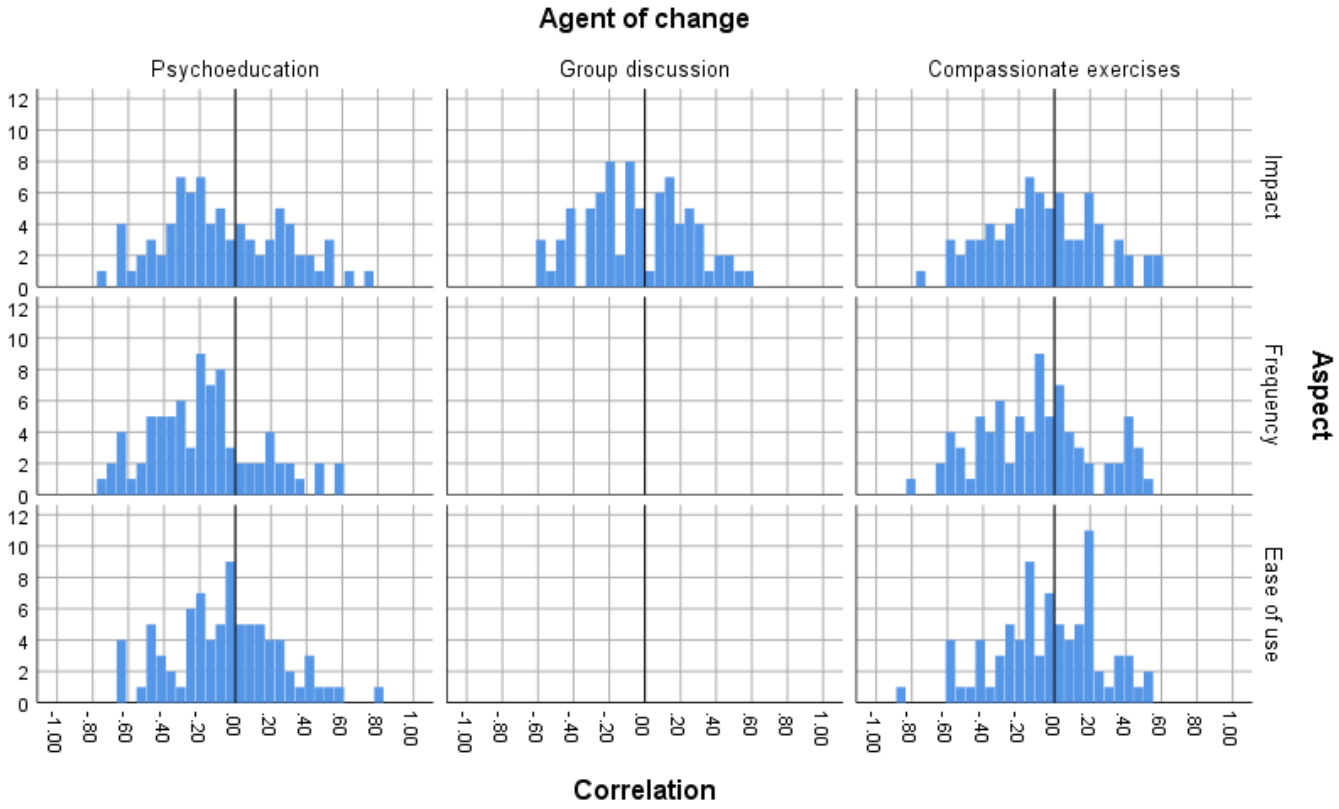
	NOT AT ALL	ONCE OR TWICE	THREE OR FOUR TIMES	FIVE-SIX TIMES	EVERYDAY
How much have you used it?					

	VERY DIFFICULT	DIFFCIULT	OK	EASY	VERY EASY
How have you found using it?					

Appendix S: Summary of data collection points

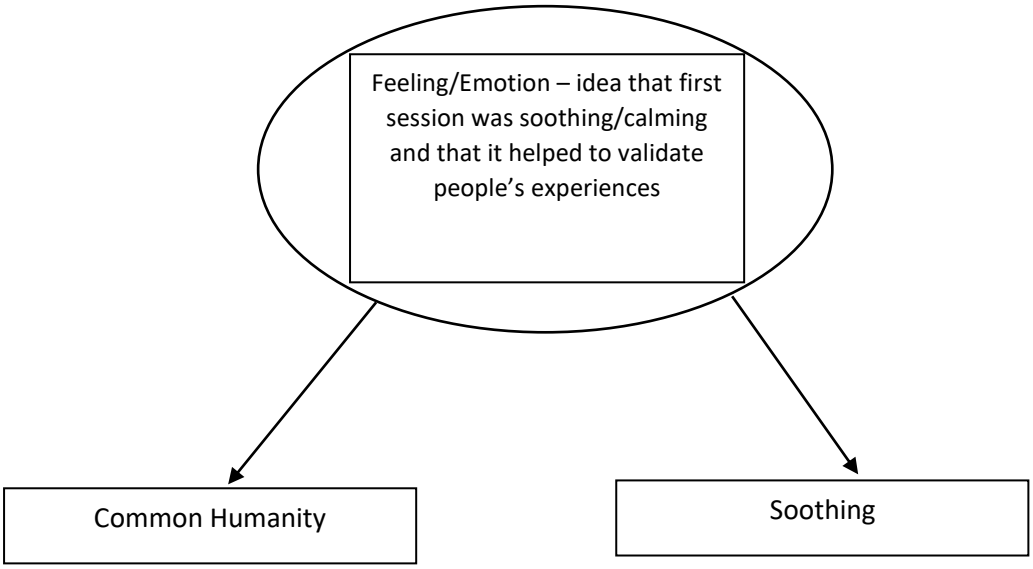
Pre group measures	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Post group measures	3 month follow-up
Depression Anxiety Stress Scale Forms of Self-criticism Compassion Engagement and Action Scale Self-compassion Scale		Start of session focus group	Start of session focus group	Start of session focus group	Start of session focus group	Start of session focus group	Start of session focus group	Start of session focus group	Depression Anxiety Stress Scale Forms of Self-criticism Compassion Engagement and Action Scale Self-compassion Scale	Depression Anxiety Stress Scale Forms of Self-criticism Compassion Engagement and Action Scale Self-compassion Scale
		Past week rating	Past week rating	Past week rating	Past week rating	Past week rating	Past week rating	Past week rating	Past week rating	Focus group
	Current week rating	Current week rating	Current week rating	Current week rating	Current week rating	Current week rating	Current week rating	Current week rating		

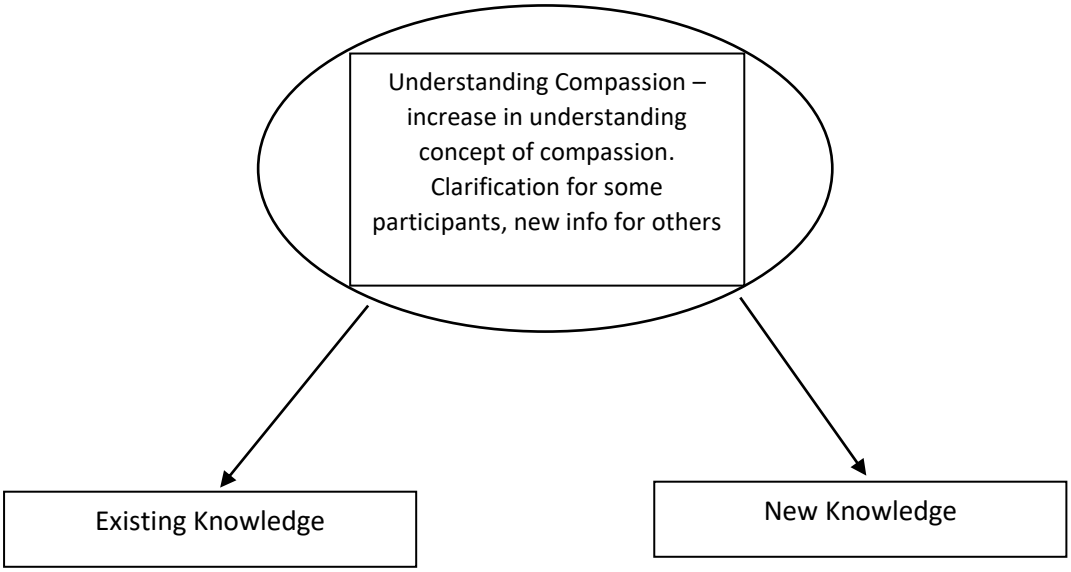
Appendix T: Histograms of all correlations between weekly ratings and outcome measure changes broken down by Agent of Change and Aspect



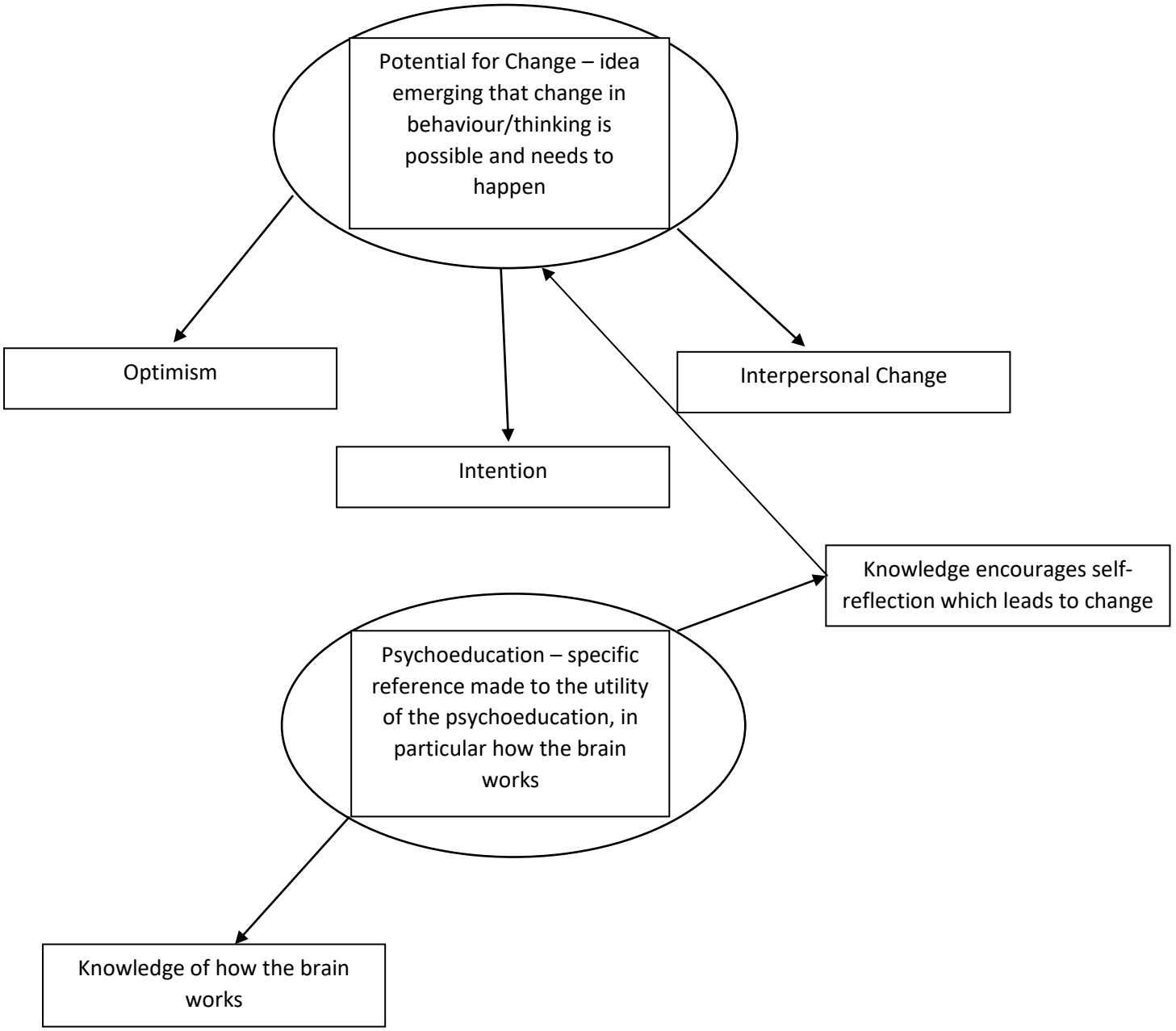
Appendix U: Themes from qualitative data (individual responses)

Session 1: Thematic Map

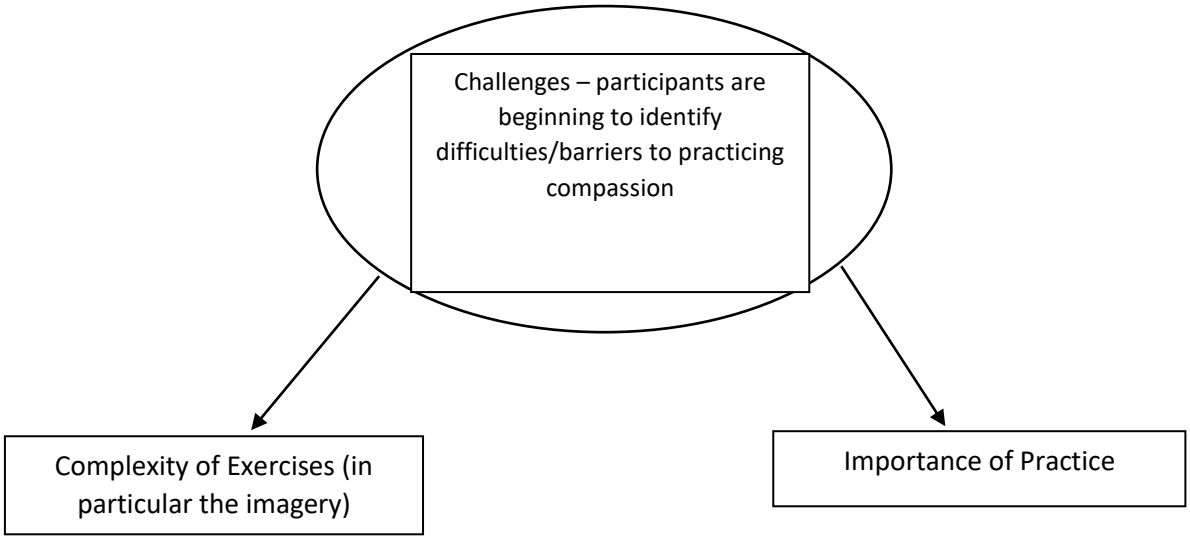


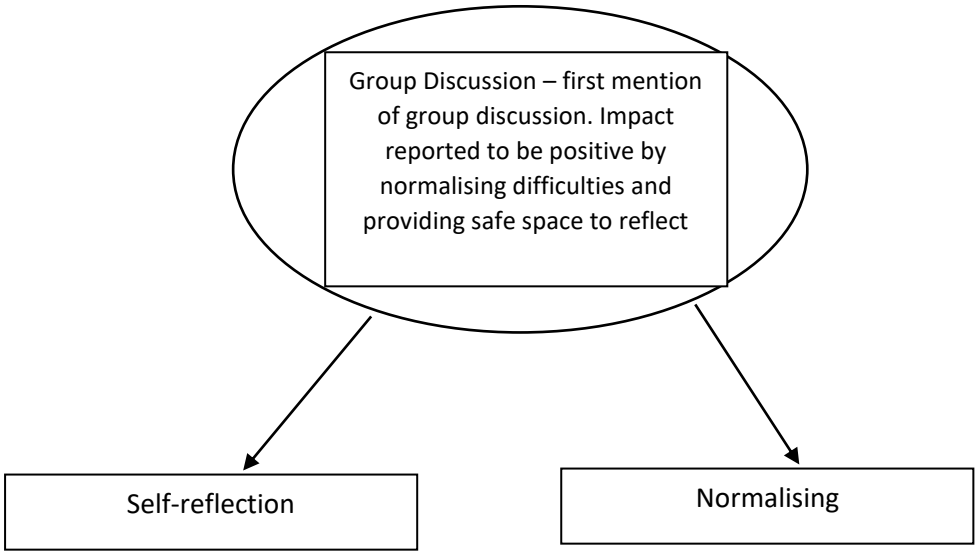


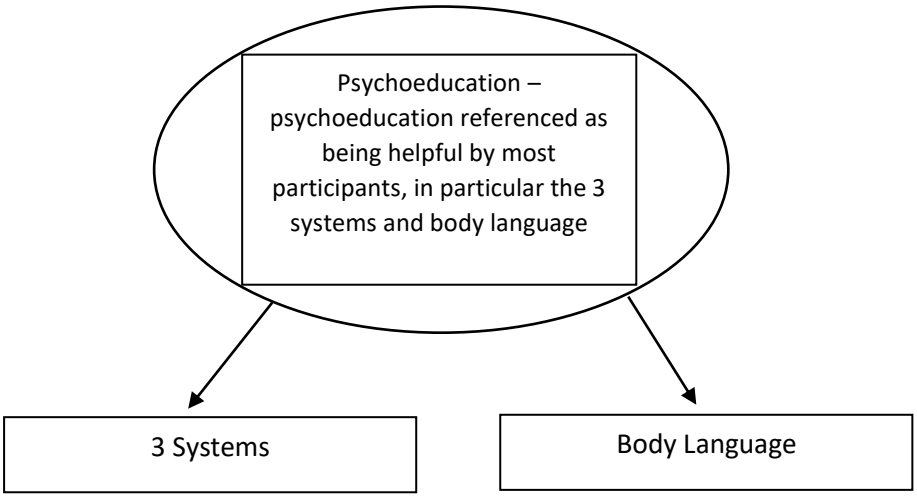
Session 2: Thematic Map



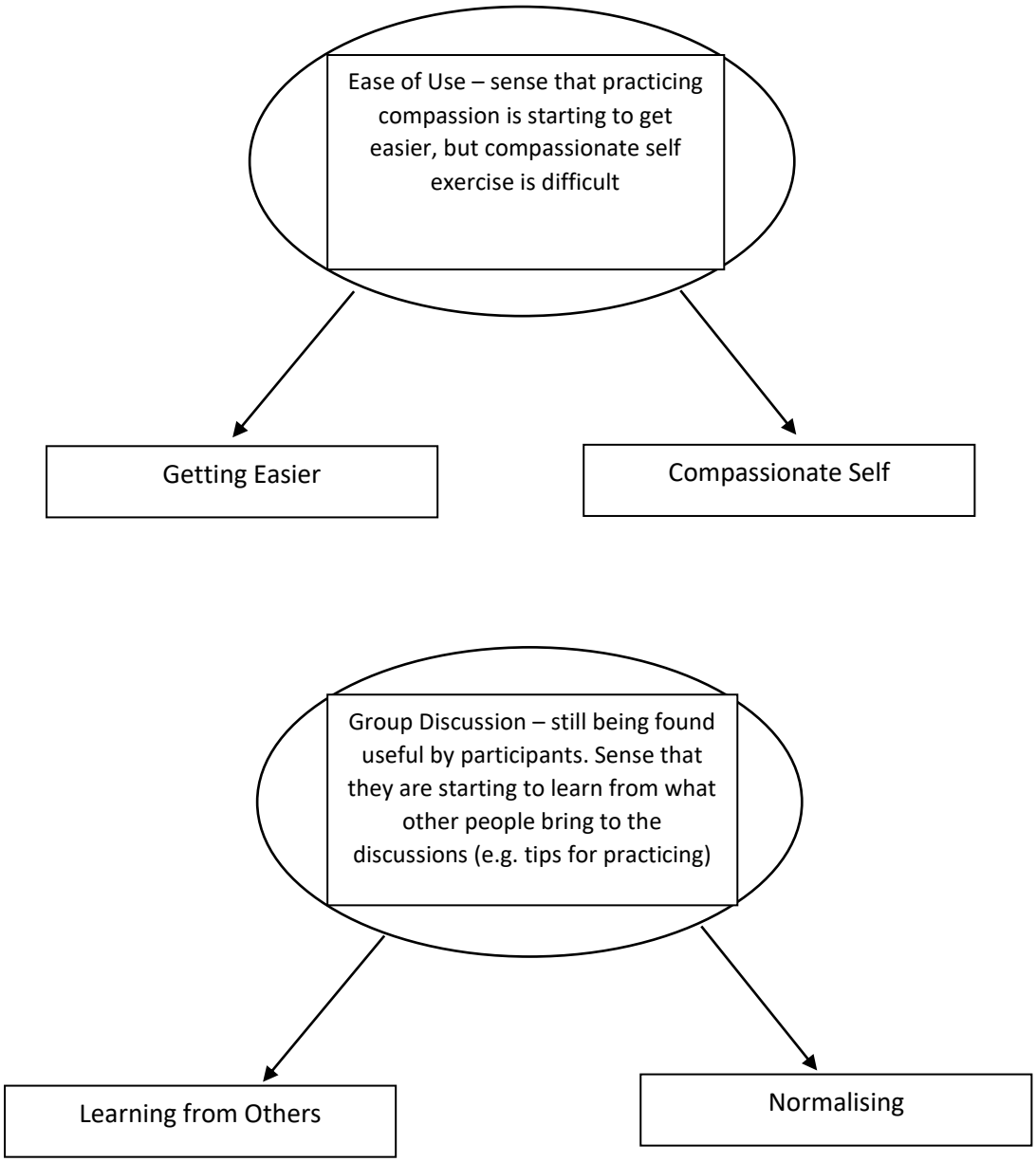
Session 3: Thematic Map



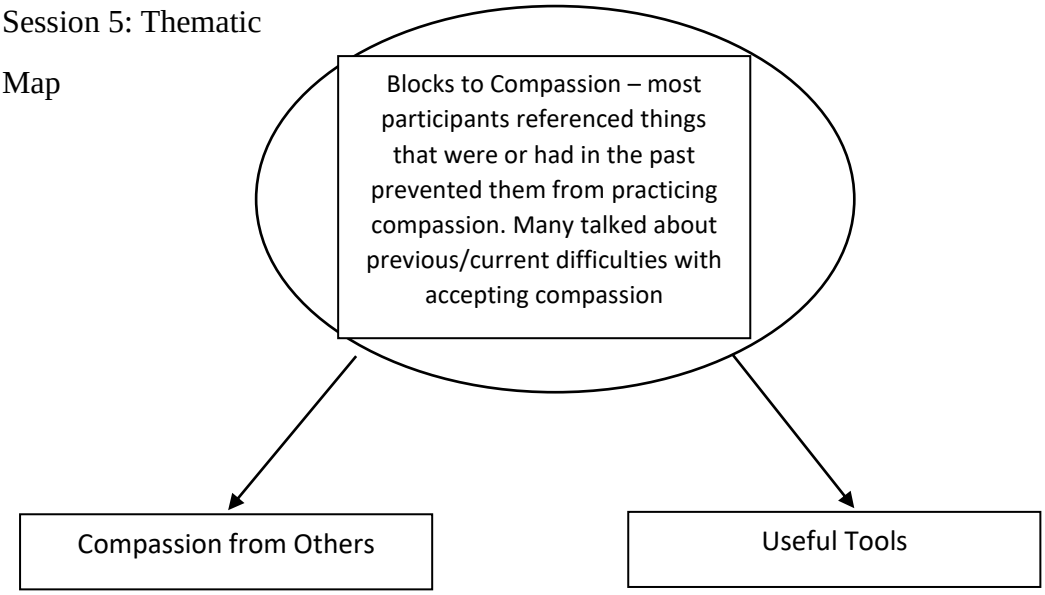


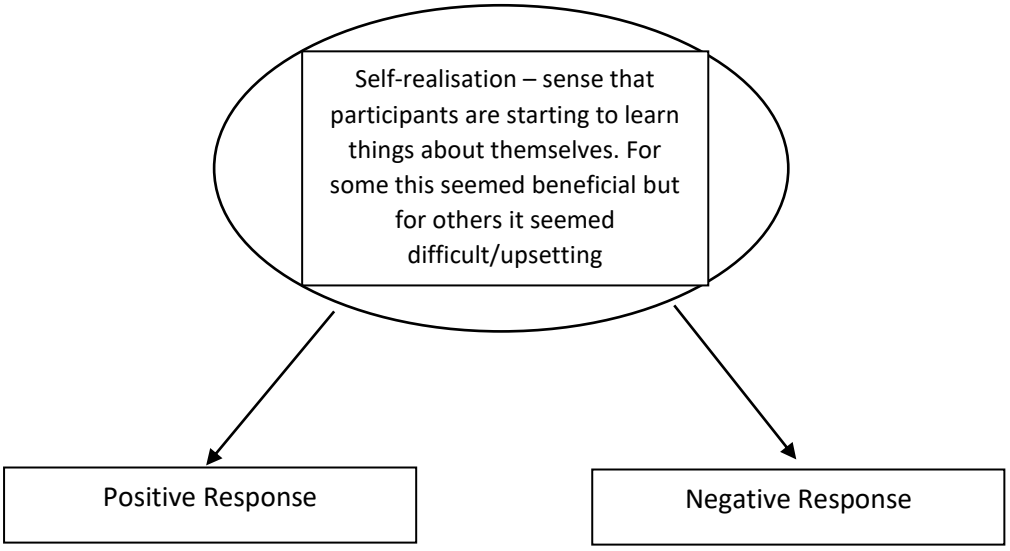


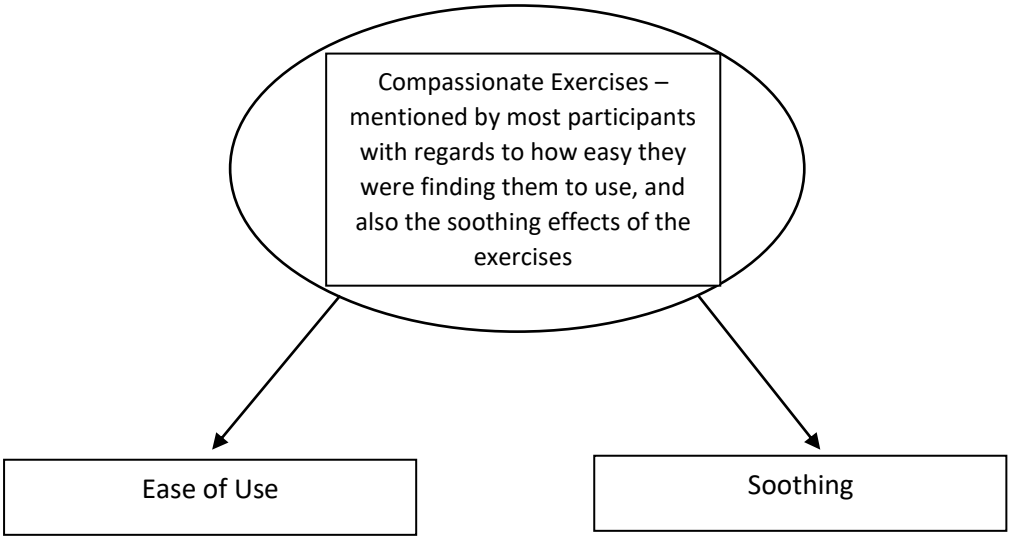
Session 4: Thematic Map



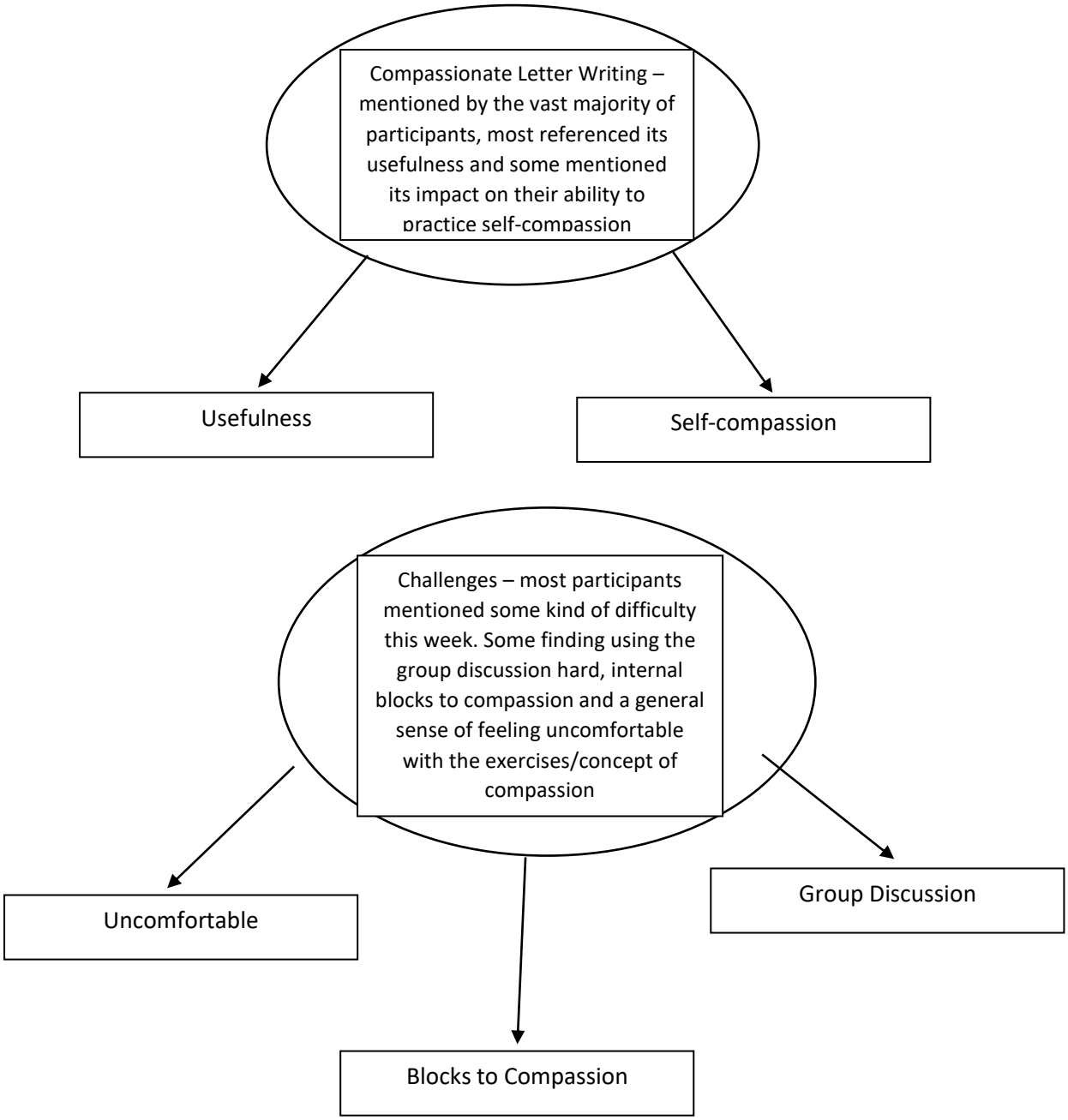
Session 5: Thematic Map



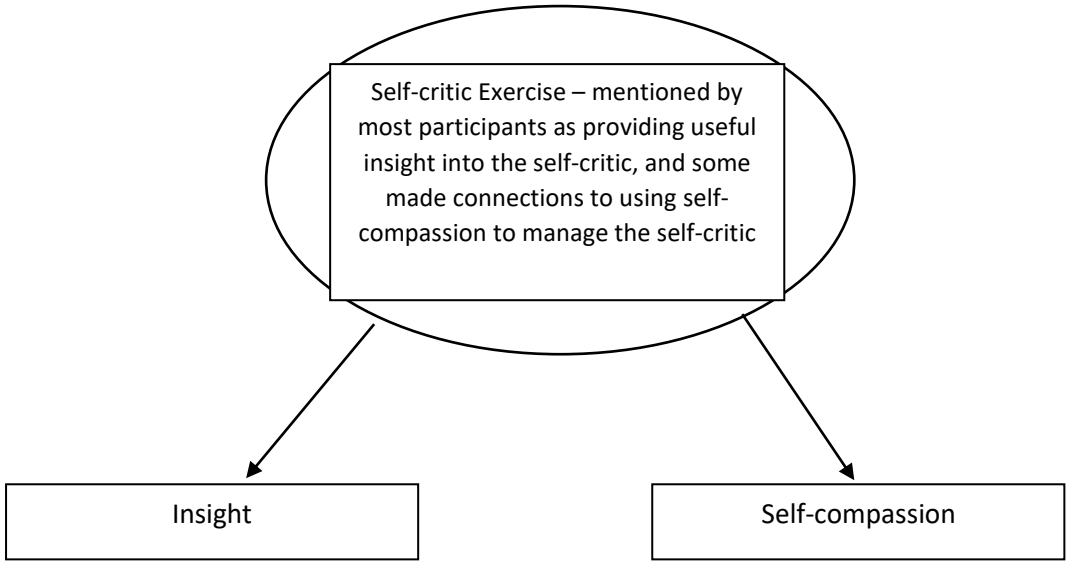


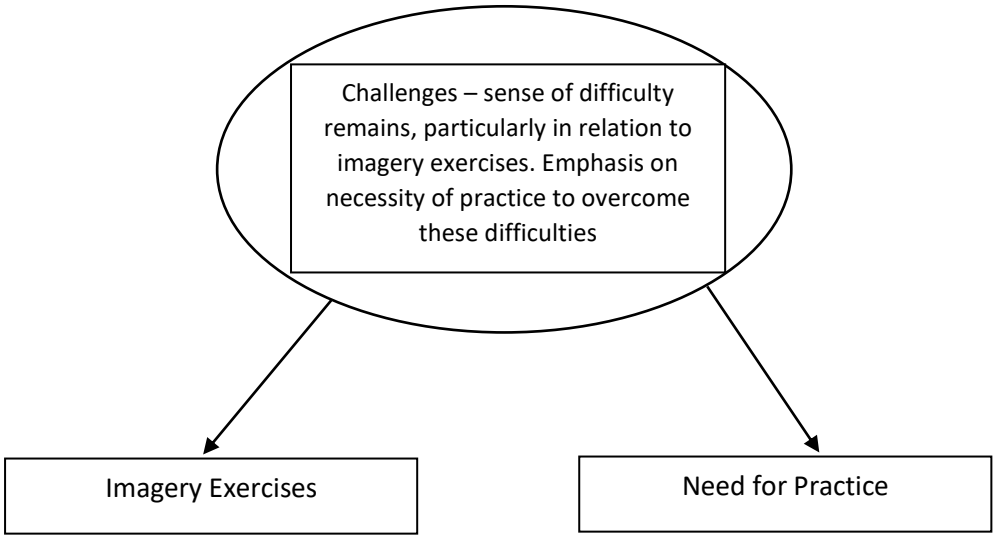


Session 6: Thematic Map

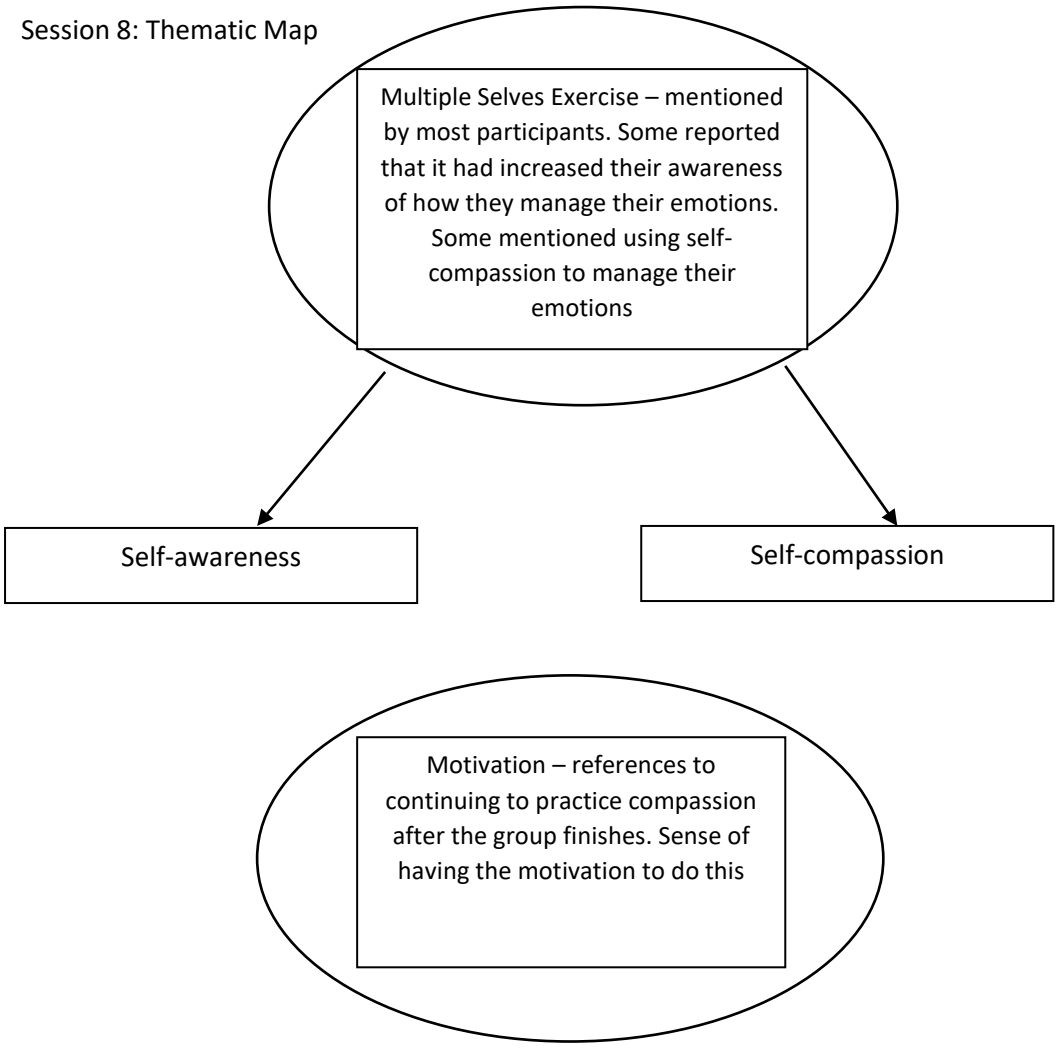


Session 7: Thematic Map



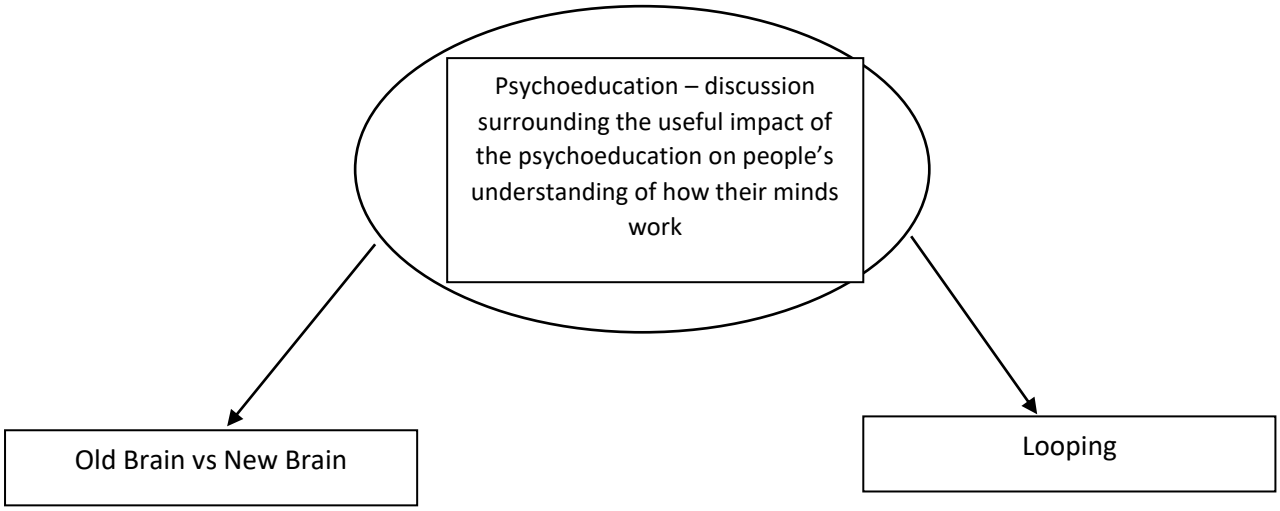


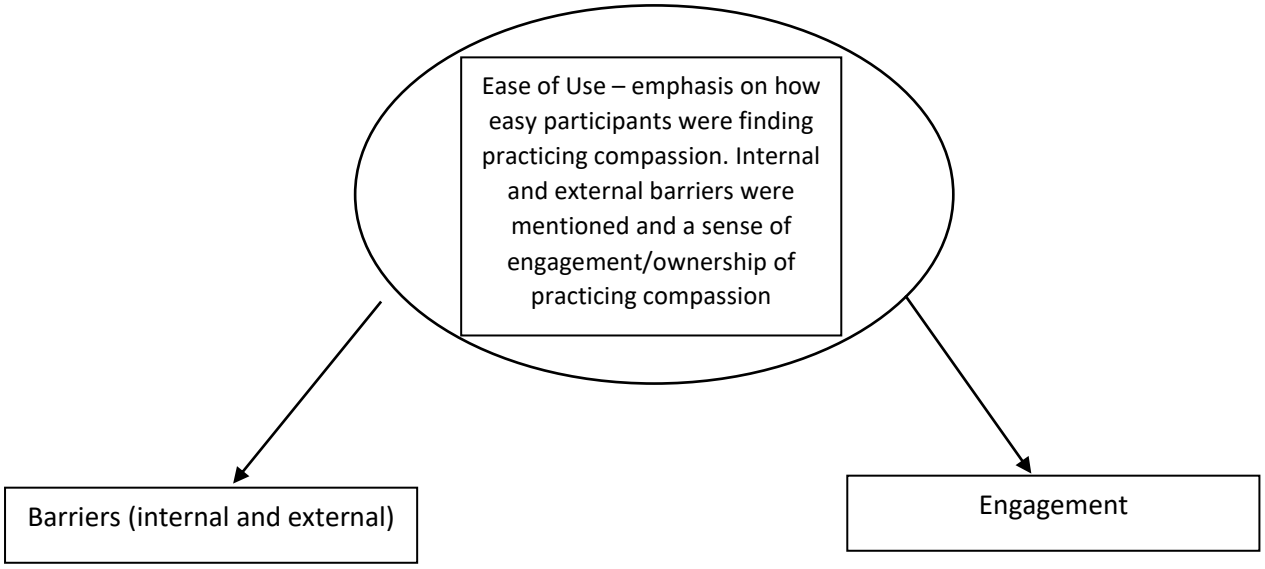
Session 8: Thematic Map



Appendix V: Themes from qualitative data (group responses)

Session 1: Thematic Map





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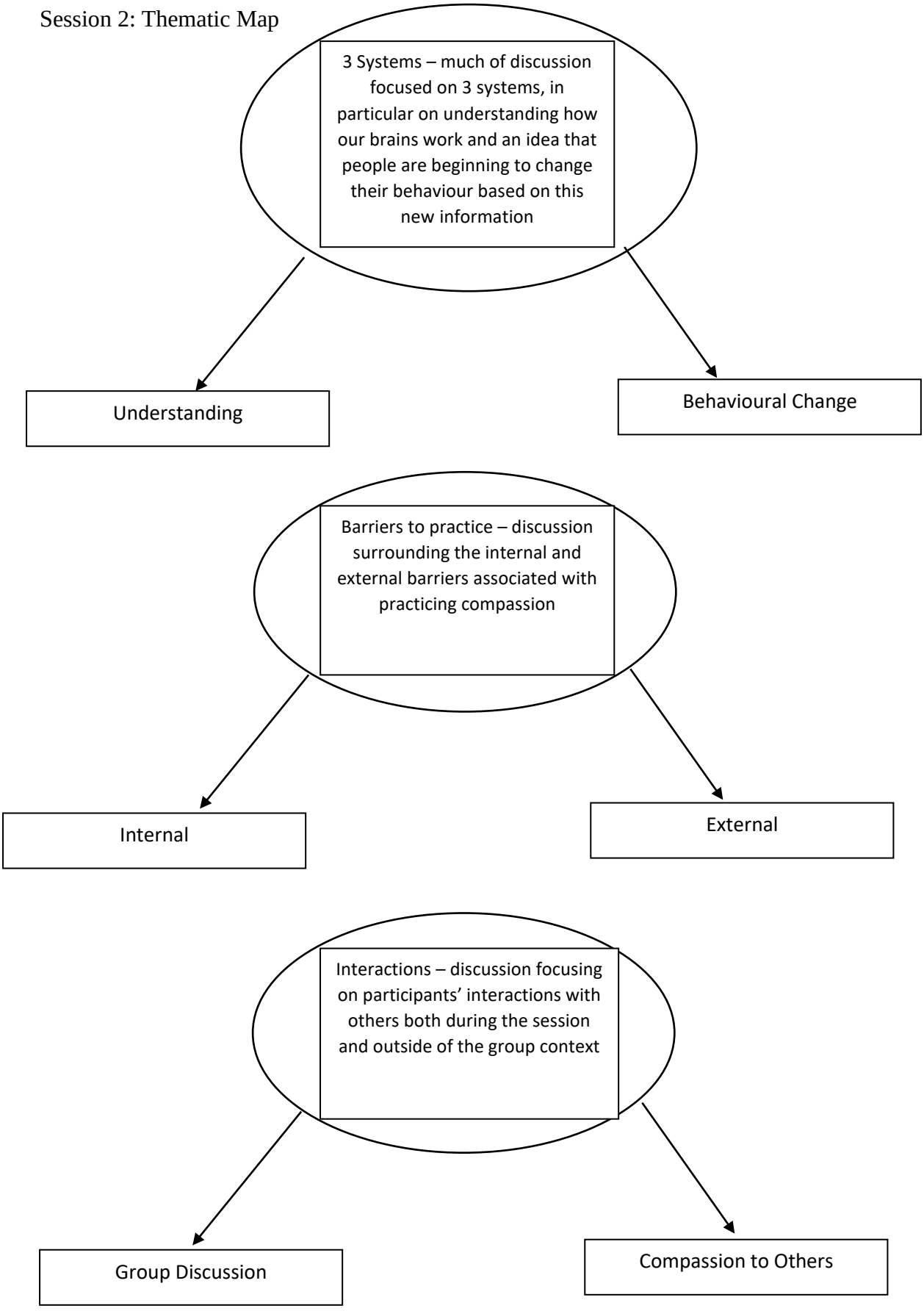
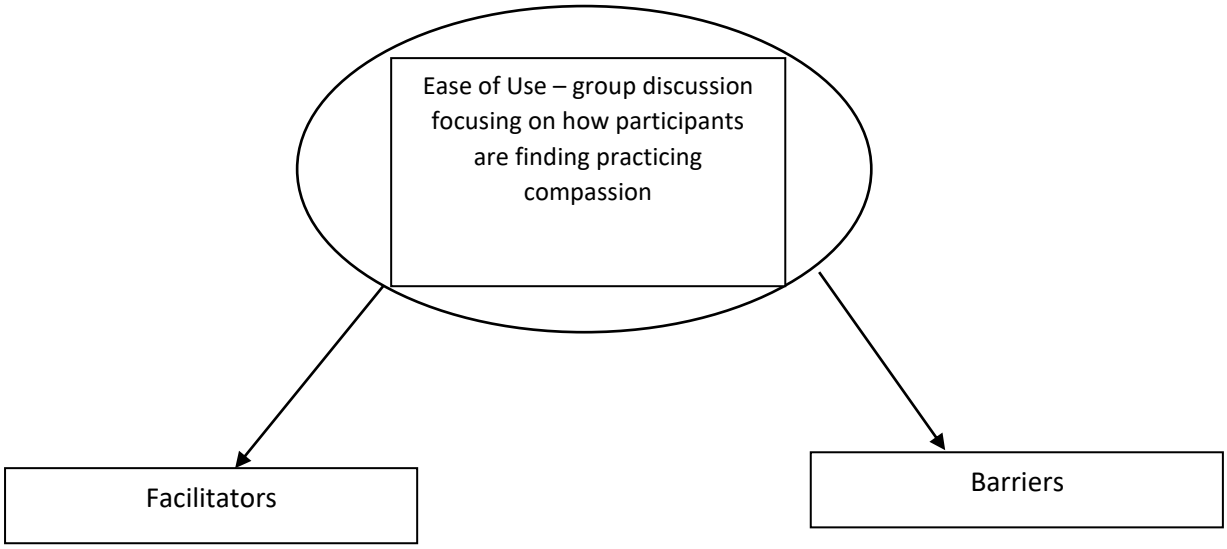
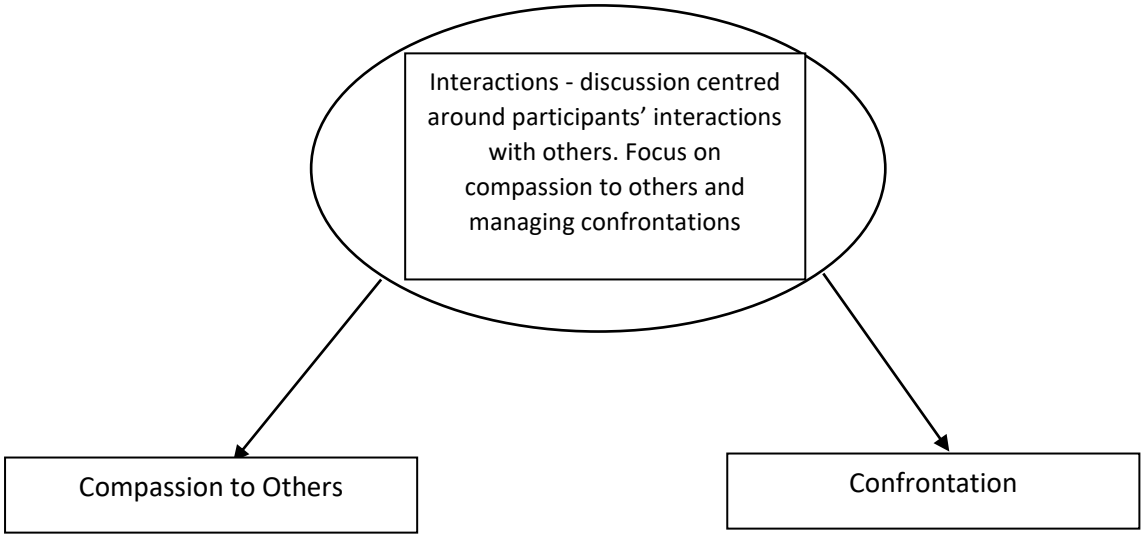
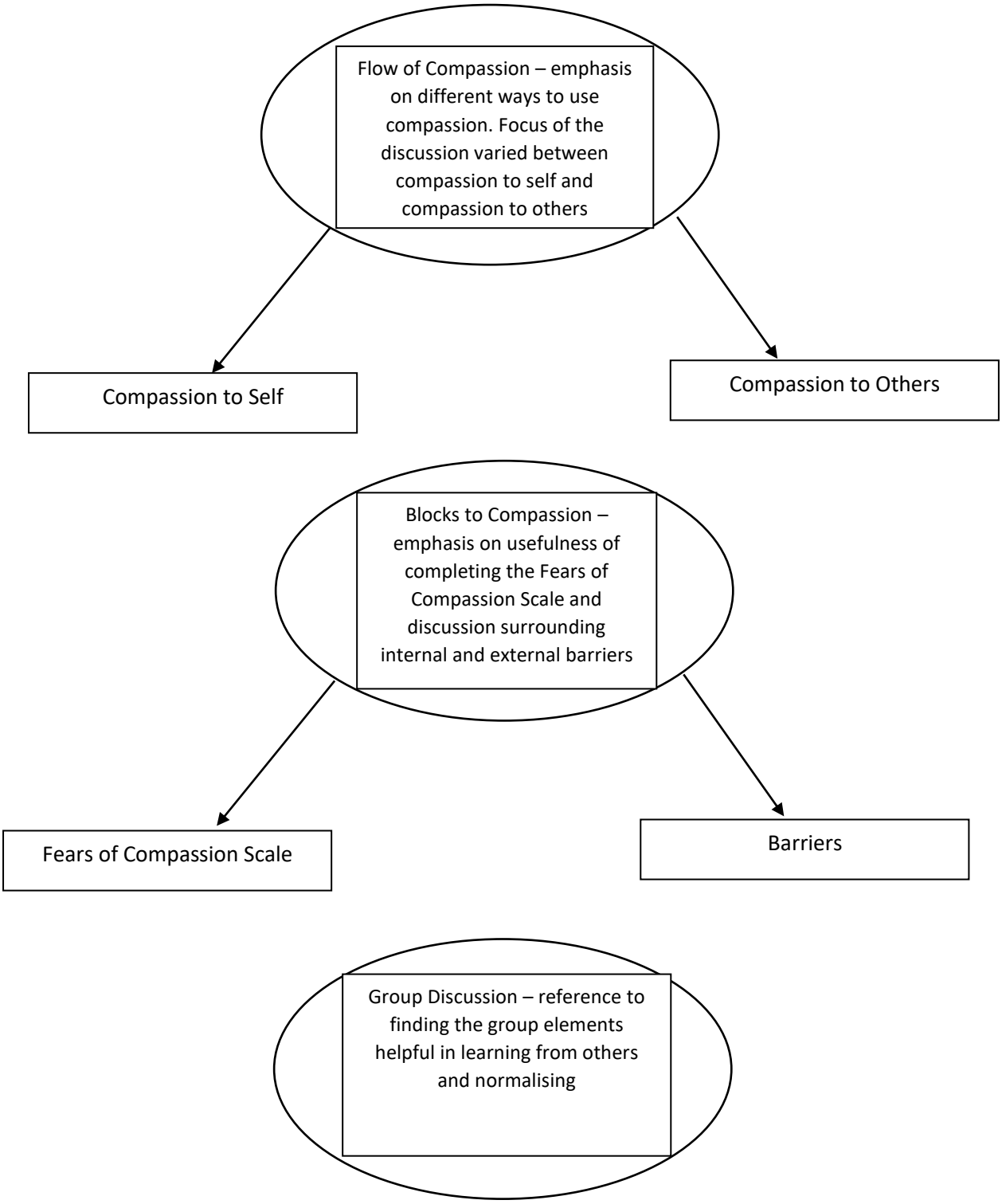


Session 3: Thematic Map

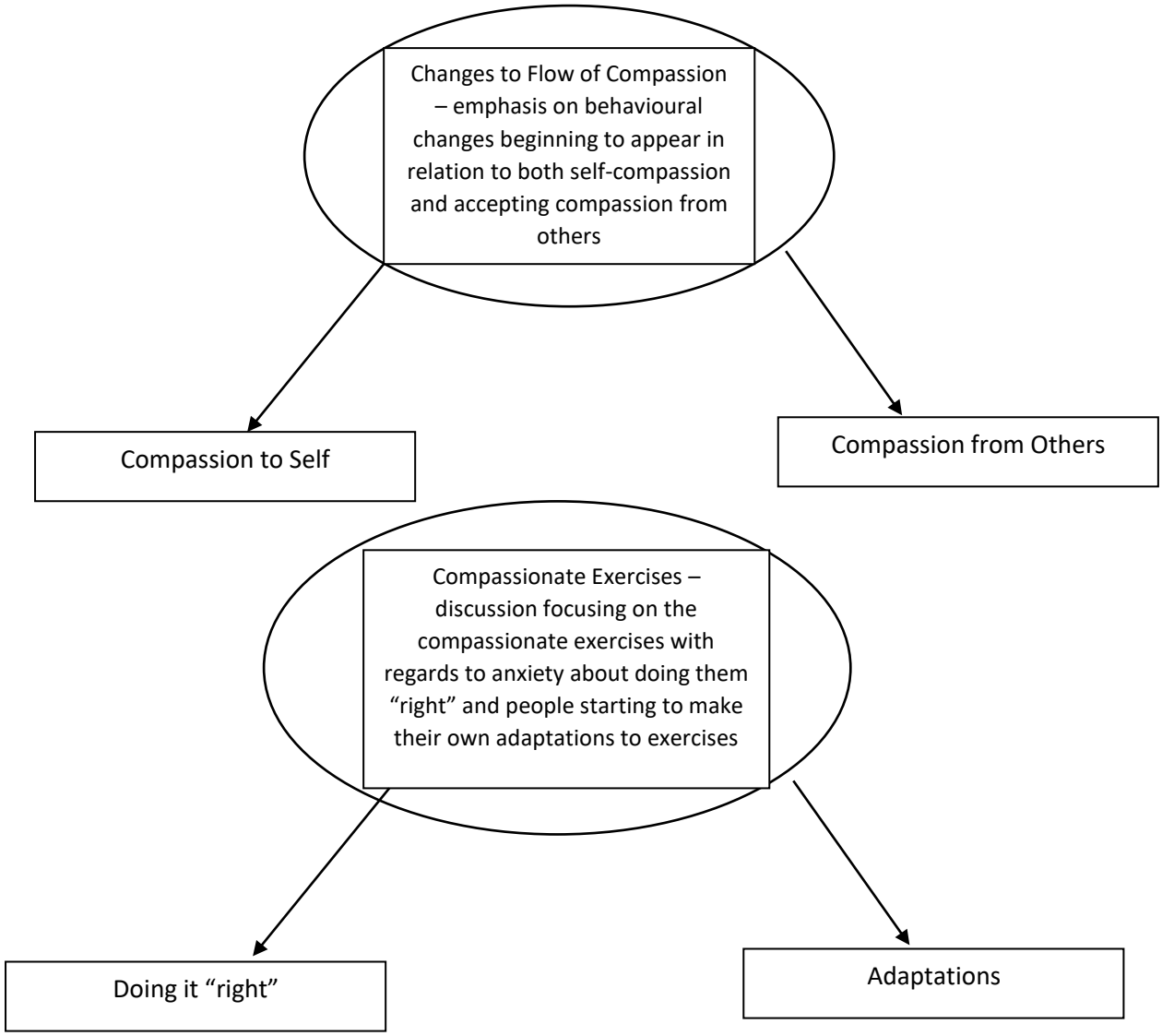




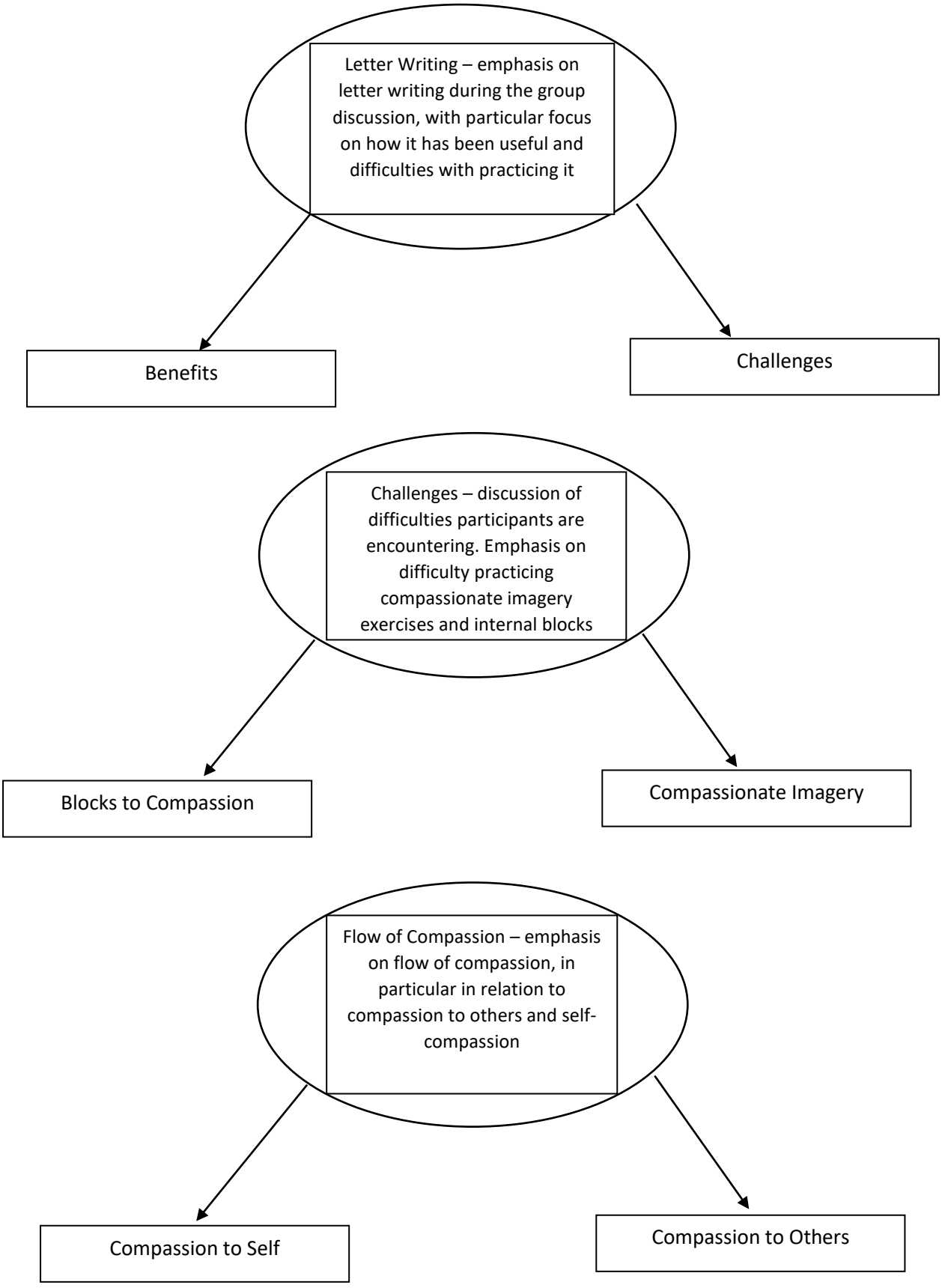
Session 4: Thematic Map



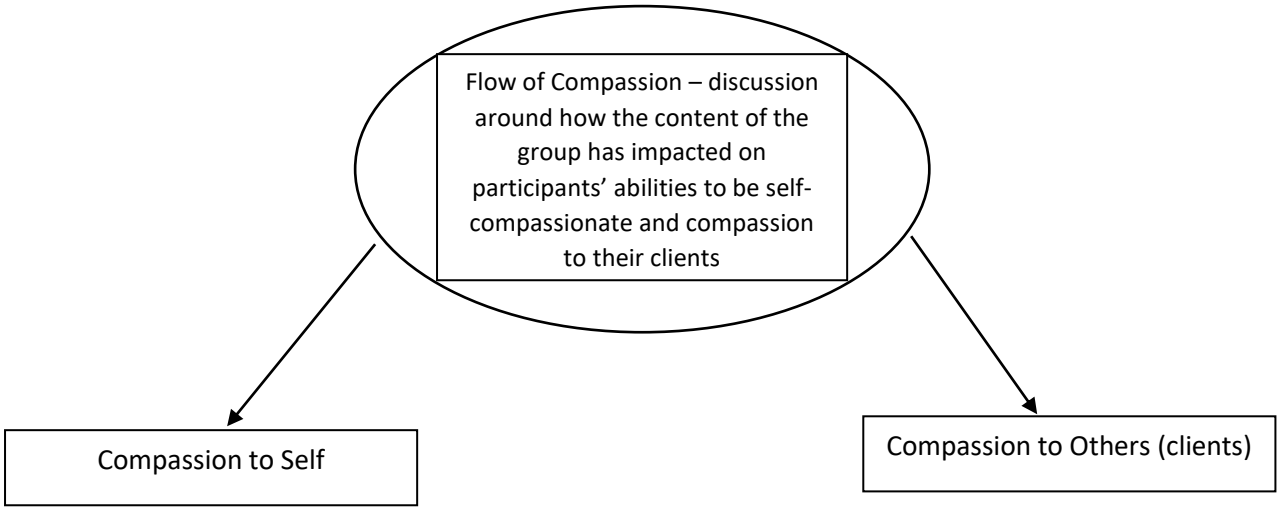
Session 5: Thematic Map

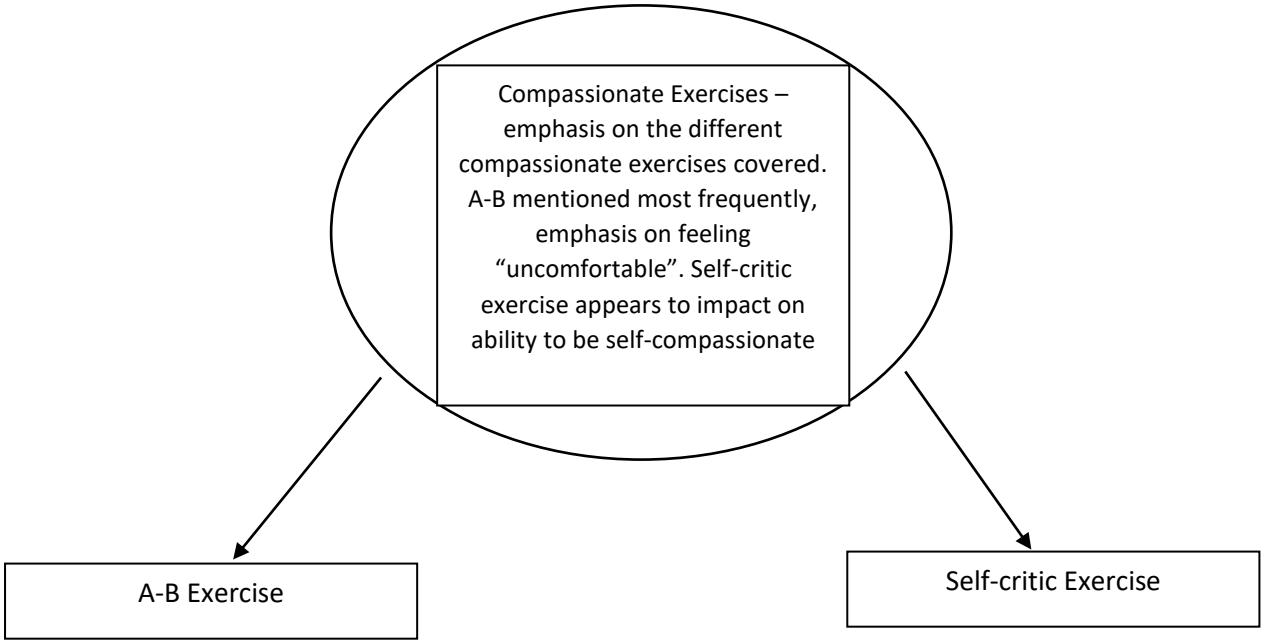


Session 6: Thematic Map



Session 7: Thematic Map





Session 8: Thematic Map