Evaluating a Transdiagnostic, Mindfulness-Based Cognitive Therapy (MBCT) Group for Service Users Transitioning out of Secondary Mental Health Care Services.

Louise Noronha

A thesis submitted in partial fulfilment of the requirements of the University of East London for the degree of Professional Doctorate in Clinical Psychology

October 2018

ABSTRACT

Background: Traditional Cognitive Behaviour Therapy (CBT) has developed within a disorder-focused paradigm and focuses on altering the specific content of thoughts. However, emerging evidence suggests that there may be a number of cognitive and behavioural processes that are shared across different psychological disorders, and are therefore "transdiagnostic". It has been further suggested that these processes may themselves share commonalities. Mindfulness-Based Cognitive Therapy (MBCT), is thought to target a core process of "inflexible awareness" and may also target processes of "experiential avoidance" and "control", which are thought to underlie these transdiagnostic processes.

Aims: The current study aimed to evaluate the usefulness of group MBCT within a transdiagnostic population of service users, transitioning out of secondary care services. The study further aimed to investigate the impact of group MBCT on a wide range of cognitive and behavioural processes to understand the transdiagnostic potential of the intervention. A final aim was to explore participants' experiences of change as a result of the group and to determine which aspects of the group were helpful or unhelpful.

Methods: A mixed-methodological, small-N design was employed. Six participants from an inner-city Primary Care Mental Health Service were recruited to take part in the study. Participants attended an 8-week MBCT group facilitated by an experienced mindfulness teacher. Symptom-based, process-based and goal-based outcome measures were collected on weekly basis and at one-month follow-up. Five participants subsequently took part in a semi-structured qualitative interview to discuss their experiences of the group.

Results: Participants reported finding the group useful in moving towards valued outcomes and changes were observed on process-based measures. Participants tended to engage less in cognitive and behavioural trandiagnostic processes and demonstrated increases in flexible awareness and reorganisation of conflict over the course of the group. However, limited changes were observed on symptom-based measures. Participants described

therapeutic change as "becoming unbound from distress" and "taking back control". Participants offered useful insights into valued aspects of the group content, delivery and structure as well as the experience of being with others, and life events outside of the group, which impacted on the group experience.

Discussion: There was preliminary evidence that group MBCT was a useful intervention within the present population, and may provide a wider-reaching and more cost-effective alternative to disorder-focused group interventions. The findings also support arguments for a change in theoretical conceptualisations of psychological distress. Furthermore, the lack of observed change on symptom-based measures has wider implications for the types of outcomes used to measure meaningful change within mental health services.

Keywords: Transdiagnostic, Mindfulness, group MBCT, Contextual CBT

Table of Contents

ACKNOWLEDGEMENTS

I would first and foremost like to thank the participants who took part in the study for their commitment to attending the group, despite the difficulties you encountered in your day-today lives, and in spite of the snow! I appreciate your willingness to be open an honest in sharing your experiences. Hearing your stories has taught me to maintain hope when I have felt stuck in my own life. I hope that this account of the research does justice to the effort and time you have given.

I would also like to thank Pam and Hannah for the dedication you have shown towards the study, but more importantly towards the participants in the study. You provided calm within the chaos of measures and room bookings and I am grateful to have had the opportunity to work with such warm and caring clinicians. To Sherylin and Trishna, thank you for all of your guidance, ideas and knowledge. The reassurance you have offered me along the way has kept me going through the most challenging stages of this thesis and has been invaluable.

And finally, I want to thank my family and friends, who have put up with me over the past 3 years, it has been a long and difficult journey for all of us! Thank you for your patience and understanding, I hope we can make up for lost time. I would especially like to thank Line and Leanne for their support throughout all of my assignments leading up to this. I couldn't have done this without you.

1. INTRODUCTION

1.1. Chapter Overview

This chapter provides a narrative review of transdiagnostic approach to mental health and proposes a case for a *"core-process"* account of psychological distress. It will be argued that Mindfulness-Based Cognitive Therapy (MBCT) has the potential to target cognitive and behavioural transdiagnostic processes and possible core processes of inflexible awareness, experiential avoidance and control. A literature review of the transdiagnostic potential of MBCT will be presented and a rationale for the current study outlined.

1.2. The Proliferation of Disorder-Focused Cognitive Behaviour Therapy

Pioneered in the 1960s by Aaron Beck, 'traditional' CBT is now the most widely researched and clinically implemented psychological therapy. CBT was originally developed to address unhelpful patterns of thoughts and behaviours in people diagnosed with depression. However, the approach has since evolved within a disorder-focused paradigm, in line with classification systems such as the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V; American Psychiatric Association, 2013) and The International Classification of Diseases, 11th Edition (ICD-11, World Health Organisation, 2018). The premise of this position is that symptoms of psychological difficulties have distinct aetiologies and maintaining factors and thus require specific models of intervention. The main focus of research has therefore been to establish the difference between individuals with one disorder and healthy controls, or individuals with different disorders.

In disorder-focused CBT models, distinctions are drawn between the content of specific cognitions thought to characterise different psychological disorders, in line with Beck's content-specificity hypothesis (Beck, 1976). Disorder-specific CBT models therefore aim to alter the unique content of thoughts associated with various psychiatric diagnoses including; depression (e.g. Beck, Rush, Shaw, & Emery, 1979), anxiety general anxiety disorder (e.g. Dugas, 2004), social anxiety disorder (e.g. Clark & Wells, 1995; Leary & Kowalski, 1995;

Rapee & Heimberg, 1997), obsessive compulsive disorder (e.g. Clark, 2004; Rachman, 1998; Salkovskis, 1989), health anxiety disorder (e.g. Stern & Drummond, 1991), panic and agoraphobia (e.g. Clark, 1986, 1988), post-traumatic stress disorder (e.g. Clark & Ehlers, 2004), personality disorder (Davidson, 2000), bipolar disorder (e.g. Basco & Rush, 1996; Newman, Leahy, Beck, Reilly-Harrington, & Gyulai, 2002), psychosis (Garety, Kuipers, Fowler &Freeman, 2001; Morrison, 2001) and eating disorders (ED; e.g. Wilson, Fairburn & Agras, 1997).

1.3.   Limitations of Traditional CBT Models

Despite the wealth of evidence supporting the effectiveness of disorder-focused CBT for various mental health problems (e.g. Hoffmann, Asnaani, Vonk, Sawyer & Fang, 2012), there are several criticisms of this approach. Firstly, some researchers note the relatively modest effect sizes yielded in outcome studies (e.g. Hayes, 2004; Teasdale, 1993). Findings from component analyses and comparative outcome studies suggest that cognitive therapy is no more effective than "purely" behavioural interventions and that specific cognitive techniques such as cognitive restructuring or empirical hypothesis-testing do not produce additional clinical benefit when compared to behavioural techniques such as exposure or behavioural activation. (e.g. Dobson et al., 2008; Foa et al., 2005; Jacobson et al., 1996; Longmore & Worrell, 2007).

Furthermore, research has struggled to demonstrate that improvements seen in cognitive therapy can be attributed to altering "dysfunctional" thoughts (Burns & Spangler, 2001; DeRubeis, Siegle & Hollon, 2008), whilst non-cognitive interventions, such as drugs, can reduce negative cognition (Simons, Garfield, & Murphy, 1984). Beck's (1976) cognitive content-specificity hypothesis (CCSH) is a central tenant of cognitive theory and thus disorder-specific CBT models. However, despite evidence of a relationship between the specific content of thoughts and specific emotional responses (e.g. Beck & Perkins, 2001; Clark et al., 1999), there is little evidence to suggest that these cognitive-affective relationships are unique. For this to be the case there would need to be a very weak, or no relationship at all between cognitions associated with one disorder and emotions associated with another. However, research, which largely

focuses on anxious and depressive cognition, is mixed (e.g. Beck & Perkins, 2001; Lamberton & Oei, 2008).

By focusing on the differences in cognitive processes and content, Clark and Taylor (2009) argue that disorder-specific CBT neglects potentially crucial commonalities and overlap in characteristics of emotional disorders which, according to Barlow and colleagues, account for more variance in emotional disorders than specific features (Barlow, Allen, & Choate, 2004). Evidence has also shown that comorbid symptoms can respond to diagnosis-specific treatments targeting primary mental health problems (Borkovec, Abel & Newman, 1995; Brown, Anthony & Barlow, 1995).

There have also been questions raised about the acceptability of disorder-focused models in clinical practice. Researchers have argued that the numerous diagnosis-specific protocols can be unmanageable in terms of training and costs, which may hinder the dissemination of CBT, leading to calls for more accessible treatment manuals (Hollon et al., 2002).

1.4.   Problems with Current Classifications of Distress

1.4.1. Reliability of diagnostic categories

Diagnostic classification systems are often adopted on the assumption that the diagnoses within them are unequivocally reliable. However, in field trials, levels of inter-rater reliability across diagnoses in the DSM-V were found to be variable and generally poor across diagnoses, with kappa coefficients ranging between 0.004 and 0.78, (e.g. Freedman et al., 2013). This may reflect the fact that disorders within these manuals are based on superficial clinical descriptions and symptoms rather than biological markers or factual knowledge of their etiology.

1.4.2. Comorbidity and Heterogeneity

The validity of diagnoses further rests on the extent to which they represent naturally occurring, discrete categories. However, approximately half of those who have received one diagnosis also meet the criteria for a second, or more,

diagnoses (Kessler, Chiu, Demler & Walters, 2005). Comorbidity presents an ethical and clinical dilemma for practitioners as it is associated with poorer treatment outcomes and increased help-seeking (Bijl & Ravelli, 2000). The absence of guidelines to inform interventions for people with multiple disorders may, in part, explain why *"evidence-based"* interventions are not routinely implemented in clinical practice (e.g. Shafran et al., 2009).

Furthermore, people with different diagnoses can experience a number of the same symptoms, whilst the symptom-profiles of those with the same diagnoses can be very different. Heterogeneous symptom profiles seen in clinical practice (Mirowsky & Ross, 2002), and the high rates of 'not otherwise specified' diagnoses (e.g. Brown, Dinardo and Barlow, 1994), indicates the poor validity and utility of diagnoses (Timimi, 2014), and oversimplifies individuals' experiences.

1.4.3. Dimensionality

Despite the recognition that "scientific evidence places many, if not all disorders on a spectrum" (American Psychiatric Association, 2013, p. 6; van Heugten-van der Kloet & van Heugten, 2015), diagnostic systems still adopt a categorical approach, which imposes artificial boundaries between "illness" and "wellness" (Narrow and Kuhl, 2011). This can lead to stigmatisation (Timimi, 2014; Magliano et al., 2017), and ignores the experience of those who do not meet the diagnostic threshold. Whilst this may seem obvious with regards to anxiety and depression, it also applies to other diagnoses such as psychosis, with a five to eight percent prevalence of auditory hallucinations and delusions found in the general population (van Os et al., 2009).

Sub-clinical and sub-threshold manifestations of classified disorders can be associated with considerable distress (e.g. Picinelli et al., 1999; Rodriguez, Nuevo, Chatterji & Ayuso-Mateos, 2012), whilst those given the same diagnosis may differ notably in terms of distress. This poses a question as to whether services are being offered to those who most require them.

1.5. The Transdiagnostic Approach

1.5.1. <u>The Transdiagnostic Approach to Mental Health</u>

Transdiagnostic theory provides an alternative account of psychological distress beyond the constraints of diagnostic systems and there is a growing evidence-base underlying this approach. This paradigm shift is supported by leaders at the National Institute of Mental Health (NIMH) who have called for a paradigm shift away from classification based on signs and symptoms (Insel et al., 2010).

Historically, psychological approaches to the treatment of distress have also been broadly transdiagnostic. For example, Psychodynamic approaches focused on uncovering core emotional conflict (Roy-Byrne, 2017) whilst behavioural approaches focused on altering observable, learned behaviours through operant and classical conditioning, irrespective of the types of difficulties presented by clients (Pavlov, 1928; Skinner, 1936; Watson & Rayner, 1920; Wolpe, 1958). Indeed, early cognitive theorists, Beck (1967) and Ellis (1958) recognised the role of cognitive processes, such as unhelpful beliefs, illogical thinking and distorted perception across psychological disorders, prior to the instatement of the first DSM.

1.5.2. <u>Identification of Transdiagnostic Cognitive and Behavioural Processes</u>

Emerging research within the CBT tradition suggests that there may be an alternative, and perhaps complementary, approach to disorder-specific models. The "trasdiagnostic" perspective proposes that psychological disorders are underpinned by "remarkably similar" cognitive and behavioural processes (Mansell, Harvey, Watkins & Shafran, 2008).
A large-scale review by Harvey and colleagues in 2004 identified several cognitive and behavioural processes that were elevated across a wide range of psychological disorders (Harvey, Watkins, Mansell and Shafran, 2004). *"Definite transdiagnostic processes"* were defined as processes that bore at least moderate quality evidence for presence in all disorders in which they were studied, and which had been studied in at least four disorders. "*Possible*

transdiagnostic processes" were those found to be present in at least two disorders, but were potentially absent in one disorder in which they were studied. As well as co-occurrence across several disorders, each process was considered "an aspect of cognition or behaviour that may contribute to the maintenance of a psychological disorder" (Harvey et al., 2004, p.14) and were therefore considered to be "*mechanistic"* as well as "*descriptive"* transdiagnostic processes (Harvey et al., 2004). Evidence indicating a causal role of these processes in the development of various mental health difficulties was presented in the review. In total, Harvey and colleagues identified twelve "definite" and nine "possible" transdiagnostic processes, grouped into four cognitive domains; attention, memory, reasoning and thought, and a behaviour domain (Table 1).

Table 1: Definite and possible transdiagnostic processes identified by Harvey et al. (2004)

Domain	Definite Transdiagnostic Processes	Possible Transdiagnostic Processes
Cognitive		
Attentional	• Selective attention to external stimuli • Selective attention to internal stimuli • Attentional Avoidance/ Attention to sources of safety	
Memory	• Explicit selective memory • Recurrent memories	• Implicit selective memory • Overgeneral memory • Avoidant encoding and retrieval
Reasoning	• Interpretive reasoning • Expectancy reasoning • Emotional reasoning	• Biased attributional reasoning • Availability heuristic • Threat confirmation • Confirmation bias • Covariation bias
Thought	• Negative recurrent thinking (rumination and worry) • Positive and negative metacognitive beliefs	• Thought suppression
Behavioural	• Overt avoidance behaviour • Safety-seeking behaviour	

Since Harvey and colleagues' review, other cognitive-behavioural transdiagnostic processes have been identified including *"perfectionism"* (Egan, Wade & Shafran, 2011) and *"post event processing"* (Laposa, Collimore & Rector, 2014). However, these might be conceptualised as combinations of worry, rumination, safety-seeking or avoidant behaviour (e.g. Flett, Coulter, Hewitt & Nepon, 2011; McEvoy, Mahoney & Moulds, 2010).

An important challenge to the transdiagnostic approach is explaining why people with psychological problems can appear to present very differently. For example, the presentation of someone diagnosed with OCD may look very different to the presentation someone diagnosed with psychosis or depression. One explanation may lie with Klinger's (1996) "current concerns" theory, which proposes that a latent processing state is initiated when commitment is made to a goal, until the time that the goal is either reached or disregarded. Goal pursuit is enabled through the sensitisation of emotional responses and cognitive processing of cues associated with the goal. For example, someone diagnosed with "panic disorder" may have a goal to prevent a panic attack and the potential consequences of having one (e.g. losing control, going crazy, dying), whilst someone diagnosed with OCD might be most concerned about preventing contamination. Harvey and colleagues (2004), suggest that an individual's target of concern is determined by their biology, personality, culture and life experiences.

1.6. Identification of a Single Core Transprocess

The above research has led to the identification of numerous transdiagnostic processes with little regard for the similarities between them.

Building on Harvey and colleagues' seminal review, Patel and colleagues (Patel, Veale & Mansell, 2015) developed the Cognitive Behavioural Processes Questionnaire (CBP-Q), a 15-item self-complete questionnaire, which mapped onto the definite transdiagnostic processes identified. The development of this questionnaire enabled direct comparison of these transdiagnostic processes

across clinical and non-clinical samples. Factor analysis revealed that 42% of variance in participants' responses could be attributed to a single factor, onto which 12 of the 15 items were highly loaded (>0.4). The authors suggested that their finding was indicative of the existence of a single, core *transprocess* that might determine the degree of engagement with various transdiagnostic processes.

Patel and colleagues were not the first researchers to identify this higher-order factor. The term "transprocess" was first coined by Field and Cartwright-Hatton (2008) who, examined the ability of multiple measures of intrusion, interpretation, rumination, worry, obsessive beliefs and shame to predict social anxiety in a sample of 559 students. Using Structural Equation Modelling (SEM) the authors demonstrated that treating all of the processes as a single factor, provided a model that better fitted the data than one which treated each process as a separate predictor. A further meta-analytic study reported a SEM of 159 effect sizes across 73 published articles, which assessed the relationship between six cognitive and behavioural processes (pessimistic inferential style, dysfunctional attitude, ruminative style, anxiety sensitivity, intolerance of uncertainty and fear of negative evaluation) and measures of anxiety and depression. Again, a single-factor model was found to produce the best fit to the meta-analytic data. However, in both studies, the authors were unable to speculate about what this transprocess might be.

The above research, based on different methodologies and samples, seems to converge on a single factor solution; a result that has recently been replicated within a study of 313 individuals seeking treatment for mixed anxiety and depression (Mansell & McEvoy, 2017). Importantly, Mansell and McEvoy employed a wider range of measures of transdiagnostic processes than previous studies and assessed variance at an item-level, thus addressing some of the limitations of previous research. The authors suggested four potential reasons for the superiority of a one-factor model: a) symptom clustering, b) a close relationship between different constructs, c) an established transdiagnostic process or d) a single core process.

Other researchers have attempted to conceptualise and label this overarching transprocess. Bird, Mansell and Tai (2009) also used SEM to demonstrate that treating measures of experiential avoidance, worry and rumination as a single factor model in predicting scores on anxiety and depression measures, produced comparable fit to the data, but also accounted for relatively more of the variance in symptoms than treating each process as a single predictor. The authors studied item loadings using Confirmatory Factor Analysis and proposed that the transprocess represented an inability to control negative thinking, which they termed "uncontrollable negative thinking". Similarly, Aldao and Nolen-Hoeksema (2010) found that measures of suppression, and rumination loaded highly onto a single latent factor, which was termed "cognitive emotion regulation".

1.7. Theoretical Conceptualisations of a Core Process

1.7.1. <u>Contextual CBT</u>

A related body of literature that informs a core process approach, describes shared mechanisms of change across therapeutic interventions (e.g. Higginson, Mansell & Wood, 2011). Despite numerous attempts to demonstrate the superiority of one type of therapy over another, unequivocal proof of this has yet to be established, otherwise known as the "dodo bird" paradox (e.g. Luborsky et al., 2002). There is a general consensus that mechanisms such as cognitive reappraisal, reduction of emotional and behavioural avoidance and taking a decentred approach to experience cut across all cognitive behaviour therapies, and perhaps across all psychotherapies (Mansell and McEvoy, 2017). It is possible that these shared processes may converge on a single core process.

In recent years, there has been growing interest in, and clinical application of "Contextual CBTs", such as Dialectical Behaviour Therapy (DBT, Linehan, 1993), Action and Commitment Therapy (ACT, Hayes, Stroshal and Wilson, 1999), Method of Levels Therapy (MOL, Carey, 2001) and Mindfulness Based Cognitive Therapy (MBCT, Segal, Williams and Teasdale, 2002; Williams, Teasdale, Segal and Kabat-Zinn, 2007). DBT, ACT and MBCT take into account both contextual and experiential aspects of distress and thus focus on

altering individuals' relationships to their thoughts and emotions. In contrast, MOL focuses on reorganisation of goals to reduce the conflict that arises from attempts to control perceptions of current and desired experiences. The common underlying feature of these therapies is that they do not aim to alter the content of thoughts or emotions and thus reflect a shift away from disorder-focused CBT models.

A transdiagnostic approach is arguably the hallmark of Contextual therapies (Carvalho, Martins, Almeida and Silva, 2017), which have been applied across different psychological disorders. It is therefore unsurprising that researchers have considered whether the processes targeted by these therapies might provide a conceptualisation of the transprocess identified in factor analysis studies.

1.7.2. Experiential Avoidance and Psychological Flexibility

Experiential avoidance, is considered to be a core process underlying ACT, and has been identified by Hayes and colleagues as the functional element of several transdiagnostic processes (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). It is defined as the unwillingness to maintain contact with certain private experiences (memories, thoughts, emotions), resulting in attempts to alter the form and frequency of these events or situations that lead to them, even if doing so leads to behaviour that is inconsistent with one's goals. ACT is rooted in Relational Frame Theory (RFT), which proposes that human language creates the capacity to reflect on and evaluate every aspect of human experience negatively. Cognitive fusion to these evaluations is thought to lead to experiential avoidance.

However, there are instances where it is feasible to avoid private experiences for functional reasons. For example, it may be necessary to control feelings of anxiety when giving a presentation. Thus, Mansell and McEvoy (2017) suggest that an alternative conceptualisation of a core process is needed to distinguish enduring psychological distress from situational attempts to avoid unpleasant experiences. Neutral or pleasant experiences may also serve to reduce behavioural effectiveness and limit valued-living, for example, daydreaming

about an upcoming event might hinder completion of more important or pressing goals (Bond et al., 2011). Finally, experiential avoidance does not appear to account for selective attention to concern-related stimuli, emotional reasoning or negative recurrent thinking.

More recently, ACT has placed emphasis on cultivating "psychological flexibility"- "the ability to contact the present moment more fully when doing so serves valued ends" (Hayes, Strosahl, Bunting, Twohig and Wilson 2004, p.6). ACT aims to increase psychological flexibility through six processes relating to mindfulness, acceptance, commitment and behaviour change. Thus, the core transprocess underlying psychological distress may be better conceptualised as "psychological inflexibility"- rigid patterns of relational responding, which cause the inability to persist or change behaviour, even when doing so serves valued ends.

One of the main difficulties disseminating and implementing ACT is arguably the theoretical complexity of RFT. Furthermore, ACT is built on the premise that language influences behaviour, cognition and emotion. Metaphors are employed frequently in therapy, which can have implications for cross-cultural validity for those who do not speak English as a first language.

1.7.3. Control

According to Perceptual Control Theory (PCT), control is a core process that underlies all behaviour, and is targeted in MOL. Control theory proposes that all behaviour, including mental activities, reflect a process of feedback control. Control comprises of three elements; perception of our current situation (experience), comparison to an internal standard (the way we want things to be) and action (behaviour) to make our current experience match our internal standard. Thus, individuals are constantly perceiving and comparing their current state and behaviour to important values and goals. Where there is a perceived discrepancy, behaviour will be adjusted accordingly to reduce this (Carver and Scheier, 1982). PCT proposes that behaviours are organised within an internal hierarchy of goals, with higher order, abstract goals organising lower order, concrete goals and behaviours. Thus, an abstract goal of "being kind" is

built from a simpler goal of "comforting others", which in turn is built on a more concrete goal of "using a soft voice". Psychological distress is thought to result from chronic conflict that arises when two incompatible goals are pursued simultaneously, which prevents realisation of either or both goals. This occurs when individuals attempt to control an experience (e.g. thoughts, feelings, routines or other people), without awareness of the potential conflict this might create with other important goals (Mansell, 2005; Powers, 1973, 2005), which eventually leads to a loss of control. Conflict can be reduced through 'reorganisation'- a process of trial-and-error learning that ultimately alters our perceptions and/or goal-setting. MOL attempts to achieve reorganisation by sustaining awareness at different levels of the goal hierarchy.

Mansell, Carey and Tai (2013) suggest that the core mechanism of control provides the best theoretical conceptualisation of an overarching transprocess as it explains how engagement in cognitive and behavioural transdiagnostic processes in pursuit of one goal can lead to psychological distress thorough conflict with other important personal goals and a lack of awareness of this conflict.

MOL uses techniques to sustain awareness on conflict in order to create opportunity for reorganisation. However, a potential limitation of this approach is that it has not been delivered within a group format and it seems unfeasible that group members could be supported to meaningfully develop and sustain awareness on their individual conflicts simultaneously.

1.7.4. Inflexible Awareness

A less explored conceptualisation of the identified transprocess may be found within literature on Mindfulness-based interventions. Greeson, Garland and Black (2010) suggest that most psychological difficulties involve a problem with inflexibility, lack of insight or narrowed perspective, which could be termed "inflexible awareness". Mindfulness meditation is therefore thought to target this process of inflexible awareness.

A fundamental premise of MBCT, within contemporary psychology, is that the mind has two modes of processing (Crane, 2009); a conceptual-evaluative, *"doing"* mode and a concrete-experiential, *"being"* mode. In the *"doing"* mode, the mind engages in discrepancy-based processing i.e., attempts to reduce discrepancies between desired and current events (Teasdale, 1999; Williams, 2008). This is an essential mode for problem-solving, analysing and learning from past experiences. Although key to wellbeing and survival, if processing of personally relevant information is predominantly conceptual, this can detract from other ways of experiencing. In contrast, in the "being" mode, the mind is aware of moment-to-moment experiences from a decentred, mindful perspective. Through maintaining attentional focus on present-moment sensory experience, such as the breath, thoughts and feelings, without judgment of these experiences, mindfulness practices aim to foster "flexible awareness" in switching between these modes when processing personally relevant information.

Literature suggests that mindlessness may account for processes of control and experiential avoidance.

1.7.4.1.   *Mindfulness and control*

Watkins (2008) extended control theory in order to account for distinct processing modes. Control theory asserts that all events, behaviours and goals are represented within a hierarchy of means and ends. Superordinate abstract mental representations of goals, that denote "why" behaviours are undertaken, guide more concrete, subordinate goals and behaviour of "how" to undertake the action. Attention and awareness can be focused at any point on the hierarchy at a given moment in time. However, depending on context, if focus centres on a level of control that is too abstract, too concrete or fails to link abstract and concrete levels, this can cause distress. A key component of control is lack of awareness of conflict between goals.

The focus on awareness of thoughts, feelings and sensation in mindfulness practice and on fostering flexibility in switching between abstract and concrete modes of processing suggest that mindfulness may target arbitrary control by increasing flexible awareness across different levels of the hierarchy.

1.7.4.2. Mindfulness and experiential avoidance
Rumination and experiential avoidance are fundamental processes thought to characterise the "doing" mode within MBCT. Thus, developing the skills to tune into experiences that have been avoided is a distinctive feature of this intervention (Williams, Teasdale, Segal and Kabat-Zinn, 2007). A fundamental principle derived from Buddhist philosophy is that "pain is inevitable" (Gunaratana, 2002, p99.) and that avoidance of this experience creates emotional difficulty. Thus, mindfulness interventions aim to help people notice patterns of avoidance and, with intentionality, choose to approach these experiences instead.

Furthermore, whilst ACT does not require mindfulness meditation; skills such as exposure, acceptance, defusion and valued-based action, can all be achieved through meditation (Baer, 2003; Sharipo, Carlson, Astin and Freedman, 2006). An open trial has further demonstrated that MBSR found significantly reduces levels of experiential avoidance, rumination, thought suppression and symptoms of anxiety and depression, along with increased mindfulness (Greeson et al., 2010).

Taken together, these findings suggest that mindfulness may target experiential avoidance, and that inflexible awareness may be a key element of experiential avoidance.

1.8. Mindfulness as a Transtherapeutic Approach

1.8.1. Development of Mindfulness-Based Approaches

Originating from the Buddhist practice of achieving enlightenment, mindfulness, as it is currently understood, has developed from both Eastern contemplative psychology meditative practices (e.g. Kabat-Zinn, 2011), and Western social psychology (Langer, 1989). Both perspectives consider mindfulness to be a freeing of oneself from inflexible misperceptions, thinking patterns and self-imposed limitations that impact mental and physical health, and creativity (Greeson et al, 2010). Mindfulness is thought to involve two key components;

self-regulation of attention to the present moment and openness and acceptance of one's experience (Bishop, Lau & Sharipo, 2004). An underlying assumption is that people have an intrinsic capacity to be "mindful", which can be harnessed through intentionality and practice. Rather than just being a "tool", mindfulness is thought to be most useful when it is adopted as a way of being (Kabat-Zinn, 2005).

Mindfulness was originally formalised in Western psychology, by Jon Kabat-Zinn, as an eight-session psycho-education "Mindfulness-Based Stress Reduction" group for chronic pain and other conditions (Kabat-Zinn, 1990). The programme combined intensive meditative practices, teaching about psychological models of stress and the application of practices to everyday life challenges. Building on Kabat-Zinn's programme, Segal, Williams and Teasdale (2002) developed Mindfulness-Based Cognitive Therapy as an intervention for depressive recurrence and relapse upon recognising the limitations of medication and traditional CBT within this group. They proposed that a protective factor for preventing depressive relapse lay in the ability to step-back or "decentre" from thought processes. Thus, whilst transdiagnostic CBT elements, such as understanding relationships between activity and mood and taking alternative perspectives, form part of MBCT, they are used with the intention of fostering a decentred perspective.

1.8.2. <u>Effectiveness of Mindfulness Based Interventions Across Psychological Disorders</u>

MBCT has demonstrated effectiveness in halving relapse rates for those diagnosed with recurrent depression (Kuyken et al., 2016), for whom the intervention was originally developed. However, there is growing evidence for its application in for those diagnosed with 'resistant' depression (Kenny and Williams, 2007; Eisendrath et al., 2008), current symptoms of anxiety and depression (Strauss, Cavanagh, Oliver and Pettman, 2014), suicidal symptoms (Barnhofer et al., 2009) and residual symptoms of depression (Geschwind, Peeters, Huibers, van Os and Wichers, 2012).

A recent meta-analytic review including nine studies concluded that Mindfulness-Based Interventions (MBIs) were as effective as CBIs across a

range of anxiety disorders including generalized anxiety, social anxiety and panic disorder (Samina, Singh and Gorey, 2015). There is also research which suggests that mindfulness is effective in OCD (Madani, Kananifar, Atashpour and Bin Habil, 2013), health anxiety (McManus, Surawy, Muse, Vazquez-Montes and Williams, 2012) and ED (Wanden-Berghe, Sanz-Valhero and Wanden-Berghe, 2011).

In people diagnosed with bipolar disorder, research suggests that whilst MBCT does not reduce relapse rates, it can reduce symptoms of depression and anxiety between episodes (Williams et al., 2008; Perich, Manicavasagar, Mitchell, Ball and Hazi-Pavlovich, 2013). Furthermore, meditation has previously been contraindicated for people who experience symptoms of psychosis (e.g.Yourston, 2001; Walsh and Roche, 1979; Kuijpers, van der Heijden and Tuinier, 2007). However, these papers refer to lengthy transcendental meditation practices in reports with single or small participant numbers (Shonin, van Gordon and Griffiths, 2013). More recent pilot studies suggest that shortened mindfulness practices, with increased guidance, may promote acceptance of psychotic experiences, and build the capacity to disengage from them (Chadwick, 2014; Chadwick, Hughes, Russell, Russell & Dagnan, 2009; Khoury, Lecomte, Gaudiano and Paquin, 2013).

A comprehensive meta-analysis of 209 studies investigating the effectiveness of MBIs across psychological and physical disorders, demonstrated that MBIs produced moderate effect sizes in pre-post and waitlist controlled studies across a wide range of psychological disorders, including dual-diagnosis (Khoury et al., 2013), with the greatest effect sizes found for anxiety (Hedge's g = 0.91) and depression (Hedge's g = 0.75). MBIs were also more effective than a number of active treatments, but did not demonstrate superior effect sizes in comparison to traditional CBT. However, the authors noted a lower average attrition rate (16.25%) in comparison to traditional CBT (e.g. 22.5% of 1646 patients offered CBT in and NHS clinic; Westbrook and Kirk, 2005).

A recent systematic review and meta-analysis investigated the effectiveness of MBIs on diagnosis-specific symptoms (Goldberg et al., 2018). In this study, the definition of 'MBIs' included MBCT and interventions incorporating mindfulness

meditation as the main component. Overall, results indicated that MBIs had similar effectiveness across a wide range of psychological disorders as first-line psychological and psychiatric interventions, and were superior to other active interventions (including waitlist control). The authors noted the robustness of these findings with regards to study quality, sensitivity bias and publication bias. However, meta-analytic reviews can overlook the importance of individual differences (Farias & WIkholm, 2016) and there is some research to suggest that those with increased trait mindfulness (Baer, Smith, Hopkins, Krietemeyer & Toney, 2006) and histories of trauma and abuse (Williams et al., 2014; Kuyken et al., 2015) may benefit more from these interventions.

1.8.3. <u>Contribution of Mindfulness-Based Interventions</u>

The growing evidence base surrounding MBIs, suggests that mindfulness can offer an alternative treatment approach in its own right, or as a complementary intervention. Although MBIs have not been found to outperform established therapies such as traditional CBT, they have been shown to be more cost-effective than other interventions (Hofmann and DiBartolo, 2014; Knight, Bean, Wilton and Lin, 2015). Given the transdiagnostic focus of MBIs, they also require less professional and field training to provide effectively (Snyder and Lopez, 2011) and may be easier to master than learning numerous, disorder-specific CBT interventions.

A key element of MBIs is home practice, which can be a deterrent if seen as too demanding (Groves, 2016), however those who are able to engage with home practice have reported coming away with a "toolkit" of skills that can be employed beyond the end of the course. The propensity for mindfulness to offer a life skill, that can be practiced and incorporated into daily life, makes it a particularly exciting and promising intervention for recovery-based settings.

Thus, if one were to consider cost-effectiveness and efficiency of interventions, it might be concluded that MBIs are superior to CBIs. However, the evidence for this approach is still in its infancy compared to more established interventions.

1.9. The Relationship Between Mindfulness and Transdiagnostic Processes

Despite growing evidence highlighting the potential of MBIs across psychological difficulties, there is a relative lack of investigation into and the relationship between mindfulness and transdiagnostic processes identified by Harvey and colleagues (2004). Baer (2007) and Greeson, Garland and Black (2014) have provided overviews of the conceptual links correlational relationship between mindfulness and these processes.

Baer (2007) suggests that there may be a relationship between the "observing", "non-judging of inner experience" and "non-reactivity to inner experience" subscales of the Five Factor Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Kriete- meyer, and Toney, 2006), and self-focused attention. Correlational analysis of sub-scale scores and measures of psychological distress and wellbeing, in meditators and non-meditators, indicated that mindfulness meditation has a significant impact on self-focused attention by increasing levels of self-observation, measured on the observing scale, whilst reducing reactivity to observed stimuli, measures on the non-reactivity and non-judging scale. This effect was not found, or was reversed, in non-meditators, suggesting that attention to internal and external stimuli is only adaptive in meditators (Baer et al., 2006). In a clinical population, self-focused attention was found to be positively correlated with distress caused by hearing voices and negatively correlated with mindfulness, measured on the Mindful Attention Awareness Scale (MAAS; Brown and Ryan, 2003; Úbeda-Gómez, León-Palacios, Escudero-Pérez, Barros-Albarrán, López-Jiménez, Perona-Garcelán, 2015).

Ruminative thought patterns, central to the theory of depressive relapse underlying MBCT, are thought to be targeted by mindfulness meditation by encouraging non-reactive, active observation of thoughts and disengagement from rumination by directing attention to present-moment experiences. In the same sample outlined above, Baer and colleagues (2006) found that rumination, measured in the Rumination Reflection Questionnaire (RRQ; Trapnell and Campbell, 1999) was positively correlated with psychological symptoms and negatively correlated with wellbeing and meditation experience.

Meditators also scored significantly lower than non-meditators. Within the field of ED, ruminative thoughts about weight, body shape and eating were found to be positively associated with eating disorder symptoms beyond anxious and depressive symptoms (Cowdrey and Park, 2012).

Thought suppression, which is considered to be a form of experiential avoidance (Greeson et al., 2010, Wenzlaff and Wenger, 2000), was found to be negatively correlated to meditation experience with meditators scoring significantly lower than non-meditators on the White Bear Suppression Inventory (Wegner and Zanakos, 1994; Lykins and Baer, 2009). The focus on accepting mental experiences as they are, non-judgementally, rather than pushing them away or becoming caught up in them, may remove the need to supress aversive thoughts. Furthermore, trait mindfulness has been found to predict less distress whilst engaging in a suppression task above and beyond other variables, within a sample of healthy participants (Bullis, Bøe, Asnaani and Hofmann, 2014).

A recent study demonstrated that depressed individuals have higher levels of rumination and suppression of thoughts, more positive beliefs about rumination and negative views about the dangers and consequences of rumination, whilst also showing lower levels of mindfulness (Jakupčević and Živčić-Bećirević, 2017).

1.10. Potential Benefits of Transdiagnostic Interventions

A transdiagnostic approach can potentially address some of the clinical shortcomings of disorder-focused models, broaden the reach of psychological therapies and provide a cost-effective treatment option for NHS providers. If viable, a single approach to mental health that is relatively easy to learn, applicable across a range of difficulties and individuals and widely available, could have significant implications for public health.

1.10.1. Comorbidity and Heterogeneity

Transdiagnostic, process-focused approaches to distress may prove more clinically useful in services where issues of heterogeneity and co-morbidity are

pertinent (Mansell, Harvey, Watkins & Shafran, 2008). Instead of receiving a sequential course of therapeutic interventions for each disorder, those presenting with co-morbid difficulties could receive one intervention with the potential to improve a broader range of difficulties, in a shorter amount of time. This may not only prove to be cost-effective, but also more ethical for those accessing services. Furthermore, clinicians would not need to determine a "principle problem" before treatment could be accessed and thus transdiagnostic approaches have the potential to be more inclusive than disorder-specific approaches.

1.10.2.   Broader Dissemination of Psychological Therapies

The dimensionality of a process-focused approach further broadens the potential for dissemination of psychological interventions in a preventative way, for example, in community settings. This means that those presenting with sub-threshold symptoms, would have access to psychological interventions that they may otherwise not qualify for. However, many NHS trusts provide mental health services under a diagnostic pathway model, providing specialist services on the basis of diagnoses, which presents a challenge for the utility of transdiagnostic interventions, which would require a radically different approach to how services are set up and accessed.

1.10.3.   Cost-effectiveness and Ease of Dissemination

The lack of implementation of evidence-based practice may be due, in part, to the number of different disorder-specific interventions clinicians need to be trained in (Addis, Wade & Hatgis, 1999; Barlow et al., 2004). A single treatment protocol has the potential to be taught and learnt more quickly, thus increasing adherence and fidelity. An additional financial benefit is that services would not need to purchase protocols and pay for staff training in several different interventions, a barrier that has previously led to calls for more accessible treatment protocols (Hollon et al., 2002).

1.11. Potential Uses for a Transdiagnostic Approach

The transdiagnostic approach can be considered a complimentary, rather than opposing approach to disorder-focused models (Rector, Man & Lerman, 2014) and may be particularly well suited to being delivered in a group format (Windle, Newsome, Waldo and Adams, 2014). In Community Mental Health Teams and inpatient settings, the time taken to receive a sufficient number of referrals for disorder-specific groups, means that service users (SUs) may have to wait for longer to start therapy, or may not be able to access groups at all (McEvoy et al., 2015).

Group-interventions have been shown to have additional benefits, beyond the specific elements of therapy. Yalom (1995) identified eleven group processes thought to effect positive change in group therapy. Perhaps the most important of these is normalisation of problems, which can help group members feel less alone. However, groups also provide the opportunity for members to demonstrate altruism, build social skills and share experiences and information that can instil hope in others. At a personal level, understanding the experience of others can aid with self-understanding and can help people talk about their feelings and release emotional tension.

A transdiagnostic group might also be offered in situations where there are currently no evidence-based interventions, such as for SUs who are on a waiting list for individual therapy (Meier and Meier, 2017) and within inpatient services, where there is a mixed client group and high turnover.

In recent years, there has been a move towards developing enhanced primary care services for people who have been diagnosed with severe and enduring mental health problems and are "stepping down" from secondary to primary mental health care services (Newton & Fellow, 2017). Transdiagnostic group interventions may be particularly beneficial when applied within services that support people who are coping with a wide variety of complex difficulties and have fewer one -to -one contacts.

1.12. The Transdiagnostic Potential of Mindfulness Based Interventions: a Review of the Literature

1.12.1. <u>Search Strategy</u>

In order to maximise the utility of MBIs within mental health care services in the UK, it is important to elucidate whether these interventions have an impact on transdiagnostic processes within a group format in clinic-based samples and settings.

Four databases were searched (PSYCHINFO, SCOPUS, Science Direct and PUBMED) for studies that examined the impact of group-based MBIs on transdiagnostic process measures, across a wide range of Axis I diagnoses (see Appendix 1 for a full list of search terms). A total of 3396 results were obtained and were organised within Mendeley. Studies that employed a non-clinical sample, did not include mindfulness meditation as the main component (for example studies of ACT or studies combining CBT with mindfulness), or were non-UK-based, were excluded (see Appendix 2 for the full list of exclusion criteria). Seven relevant studies were identified and included in the review.

1.12.2. <u>Summary of Studies Included</u>

1.12.2.1. Negative repetitive thinking

Three studies investigated the impact of MBCT on negative repetitive thinking. Ietsugu and colleagues (2015), recruited 104 participants in Oxford and Bangor, who had a history of at least three episodes of diagnosed depression, to take part in an eight-session MBCT group. Weekly measures of rumination (Weekly Rumination Rating; WRR; Brewin et al., 2009) and worry (GAD-7; Spitzer, Kronke, Williams & Lowe, 2006) were collected. A significant difference was observed on both the WRR (p<0.05, confidence interval (CI) (95%)= 6.24-89.07) but only a marginal difference found on the GAD-7 (p<0.10, CI (95%)= -0.06- 3.93) at the start and end of the group. However, the wide confidence interval observed for the WRR made it difficult to ascertain an accurate estimation of the true difference on this scale. Investigation of the trajectories of change, using mixed linear models, indicated a gradual reduction in rumination

and worry over the course of the sessions. This was in contrast to previous research, which indicates that therapeutic change is characterised by sudden gains (Aderka, Nickerson, Boe & Hofmann, 2012; Tang and DeRubeis, 1999), but was consistent with the general view of MBIs as a skills-based training (Baer, 2012) requiring regular practice. However, there was notable individual variation around these trends. Crucially, no follow-up measures were administered, thus it was not possible to ascertain whether the changes observed were maintained over time.

Radford, Crane Eames, Gold and Owens (2012) also examined the effect of MBCT in a mixed sample of 17 primary care SUs in Bangor, identified as being vulnerable to relapse or currently experiencing mild-moderate anxious and/or depressive symptoms. Measures of anxiety (Hospital Anxiety and Depression Scale, HADS; Zigmond and Snaith, 1983), depression (HADS and PHQ-9), rumination (Ruminative Response Scale; RRS, Treynor, Gonzalez and Nolen-Hoksekma, 2003), self-compassion (Self-Compassion Scale, Neff, 2003) and wellbeing (Wellbeing Index; WBI-5, Heun, Bonsignore, Barkow & Jessen, 2001) were administered before and after the intervention, and at 6-month follow-up. Pre-post analysis revealed a significant reduction ($p<0.01$) in levels of depression, anxiety, and an increase in self-compassion with medium or approaching medium effect sizes (Cohen's *d* ranging between 0.47 and 0.67). A significant reduction in rumination was also found ($p<0.01$), although with a small effect size (0.44). Six-month follow-up also showed significant reductions in anxiety and depression ($p<0.01$), and an increase on self-compassion compared to pre-trial levels, although effect sizes were small (Cohen's *d* ranging between 0.30 and 0.45). However, there was an increase in anxiety, depression and rumination levels between session 8 and follow-up. The level of clinically-significant caseness was also reduced from 57% to 7% immediately following the intervention, but increased to 28.5% at 6-month follow-up. This suggests that courses may be too short and thus follow-up sessions, or an ongoing drop-in format may be essential to maintain benefits (Finucane and Mercer, 2006). Overall, attrition was low and sixteen participants attended at least five sessions. Furthermore, the majority of referring GPs felt that the intervention would be helpful for both anxiety and depression, suggesting that MBCT was feasible and effective in a mixed-diagnoses population.

A non-randomised study conducted in Ireland, by Kingston, Dooley, Bates, Lawlor and Malone (2007), investigated the effect of an 8-session MBCT group on residual symptoms of depression. Nineteen SUs with a diagnosis of recurrent major depressive disorder were assigned to an MBCT group (8 participants) or a waitlist control group (11 participants). Measures of depression (Beck's Depression Inventory, BDI; Beck, Brown & Steer, 1998), and rumination (Rumination Scale, RUM; Nolen-Hoeksema, 1991) were administered at the start and end of the group. MBCT was found to significantly reduce BDI scores over time, in comparison to the waitlist control group ($p<0.05$). Scores on the RUM were also significantly lower overall at the end of the intervention ($p< 0.05$), although there was no significant difference found between groups at either time-point. Despite this, large effect sizes were reported for the BDI and RUM ($d= 1.07$ and 1.16 respectively). Comparison of pre-and-post scores, and additional mid-point and one month follow-up scores, for the MBCT phases of both groups revealed a significant linear, decrease in depression scores ($p <0.05$), whilst a linear decrease in rumination scores approached significance ($p=0.55$). The observed decreases continued at one month follow-up. Along with a good level of retention within the study, these findings indicated a potential benefit of MBCT in outpatient settings for those with residual depressive symptomology, and suggested that this effect might be mediated by the effect of MBCT on rumination. However, given the small sample size and the lack of reporting of confidence intervals within the study, it was difficult to determine the accuracy of these findings.

1.12.2.2. Metacognitive beliefs
A recent study conducted in Manchester, by Capobianco, Reeves, Morrison, Wells (2018), compared MBSR with Metacognitive Therapy (MCT; Wells & Matthews, 1994, 1996) within a mixed sample of 35 participants diagnosed with depression and/or anxiety. Ten males and 25 females were randomly allocated to receive either 8-weekly sessions of either MBCT or MCT. Pre-and-post measures were administered assessing symptoms of anxiety and depression, using the HADS, and positive and negative metacognitive beliefs, using the Cognitive attentional syndrome-1 (CAS-1; Wells & Carter, 2009). Intention to treat analysis revealed a significant benefit of MCT over MBSR post-treatment

(p=0.04), however this was not retained at follow-up (p=0.12), furthermore, effect sizes were small at both time points (d= 0.12 and 0.09 respectively). A greater proportion of participants in the MCT group (71%) demonstrated reliable change post-treatment in comparison to the MBSR group (50%), and led to significantly fewer positive and negative metacognitions. However, the results were interpreted with caution given that the MCT had a significantly higher level of depression at baseline and because the MBSR facilitator had little experience in MBSR, in contrast to the MCT facilitator, who was the originator of the therapy.

1.12.2.3. Thought suppression

One study investigated the impact of MBCT on thought suppression (Hepburn, Crane, Barnhofer, Duggan, Fennell and Williams, 2009) in those previously diagnosed with depression and suicidality, who were currently in remission. Forty-three participants were randomly allocated to receive MBCT or treatment as usual (TAU) waitlist control. To measure thought suppression, participants completed the White Bear Suppression Inventory (WBSI; Wegner and Zanakos, 1994) and answered the question "in the past week how often have you tried to supress unwanted thoughts?" Depression was measured using the BDI. Participants within the MBCT group, but not the control group, reported significantly lower levels depressive symptoms (p<0.01) and self-reported thought suppression (p<0.01), post-intervention, which were found to be related through covariate analysis. Medium to large effect sizes were observed for both measures (Eta-squared =0.23). However, no significant difference was found on the WBSI. The authors concluded that MBCT may reduce depressive symptoms, and that this reduction may be related to reductions in self-reported suppression. However, the contradictory findings for on measures of suppression make it difficult to draw firm conclusions about the impact of MBCT on thought suppression.

1.12.2.4. Overgeneral memory

Two studies reported the effects of MBCT on overgeneral memory. Williams, Teasdale, Segal, Soulsby (2000) recruited 41 participants from a community mental health service in Bangor. Participants were in remission from depression, with a history of at least two previous episodes and were randomised to receive a course of MBCT and TAU or TAU alone. Symptoms of

depression were analysed using the HADS, whilst overgeneral memory was assessed using the Autobiographical Memory Test (AMT; Williams and Broadbent, 1986), in which participants were provided with cues to prompt recollection of neutral, positive and negative events. Significantly greater reductions in categoric memories were observed among the MBCT group (p =0.03), despite the absence of a significant reduction in depressive symptoms. This suggests that mindfulness may address overgeneral memory, by encouraging patients to practice noticing elements of their experience in a non-judgemental way. However, no confidence intervals or effect sizes were reported, making it difficult to determine the accuracy or size of this difference.

The second study by Crane, Winder, Hargus, Amarasinghe, Barnhofer (2012) further investigated the impact of MBCT on goal specificity and autobiographical memory in a clinical sample with current or residual symptoms of depression. A total of 27 participants (nine males and 18 females) were allocated to an 8-week MBCT group or waitlist control group. Measures of depression (BDI), overgeneral memory (AMT) and future goal specificity (Measure to Elicit Positive Future Goals and Plans; Vincent, Boddana & MacLeod, 2004) were administered before and after the group, and at three to four-month follow-up. A significant reduction in scores on the BDI were found for the MBCT group (p<0.001), who also reported significantly more specific life goals (p<0.01) which was significantly correlated with increases in autobiographical specificity (p<0.05) post-treatment. The authors suggested that this was reflective of a shift from more abstract to more concrete mode of processing following group MBCT. However, as noted the lack of qualitative analysis precluded analysis of whether changes in specificity were due to a shift in the content of goals and autobiographical memories. As with Williams and colleagues (2000) study, the lack of reporting of confidence intervals and effect sizes also made it difficult to determine the importance of these findings.

1.12.3.   <u>Limitations of the Current Evidence Base</u>

The studies included in this review all point to the potential benefits of MBIs within the UK healthcare system and have also shed light on the some of the transdiagnostic mechanisms underlying this therapeutic change. However,

there are still several shortcomings and gaps in knowledge that warrant further investigation, particularly amidst the growing popularity of these approaches within clinical services.

1.12.3.1. External Validity

Firstly, all of these studies have only focused on populations with a diagnosis of current, recurring, remitted or residual symptoms of depression, with or without anxiety. Stringent exclusion criteria were applied, which excluded those with a diagnosis of psychosis, schizophrenia, bipolar disorder and comorbid substance use problems, aside from one study, which included two participants with a diagnosis of bipolar affective disorder II. Three studies further excluded those with OCD and EDs. This greatly limits the ecological validity of the findings, particularly within secondary care services where comorbid mental health problems and heterogeneous symptom profiles are routinely seen in clinical practice.

1.12.3.2. Lack of Consistency in Measurement of Symptoms

The studies reviewed employed a variety of different measures to assess diagnostic constructs such as anxiety and depression (for example the PHQ-9, BDI and HADS were all used to measure depressive symptomology). The number of different measures available may reflect the poor reliability and validity of these constructs. However, this greatly limits the ability to compare outcomes across these studies, and thus precludes the development of the evidence-base and theory within this field. It also presents a challenge for future research, and the present study, as it provides little indication of which symptom-based measures to select.

1.12.3.3. Limited Range of Processes Studied

None of the studies reviewed included a measure of mindfulness, and it is therefore unclear whether changes in scores on symptom and process-based measures were related to changes in mindfulness. Furthermore, many transdiagnostic processes have yet to be examined within a clinical intervention study, which limits our understanding of *how* these mindfulness-based interventions produced their beneficial outcomes (Baer, 2007). The studies outlined above have tended to use different process-based measures, which limits comparison of effects, and each study has only investigated a single

37

process. This makes it difficult to comment on the broader transdiagnostic potential of group MBCT and precludes analysis of the relative impact on different transdiagnostic processes.

1.12.3.4. Defining Change

Another limitation is that the research outlined above assumes that changes in symptom and process-based measures are synonymous with meaningful change. All but two studies (Ietsuguet al., 2015; Radford et al., 2012) reviewed have inferred treatment effects on the basis of comparisons between mean changes resulting from MBIs. However, as noted by Jacobson and Truax (1991), the existence of a treatment effect does not correspond to the importance nor the clinical significance of the change. Clinical significance is determined by external standards set by stakeholders, yet there is little consensus as to how this should be defined. For example, Radford and colleagues defined clinical significance as "caseness", whilst Jacobsen and Truax (1991) provide a statistical definition of clinically significant change (CSC) and reliable change (RC). However, there has also been a growing interest in the use of Goal-Based outcomes (GBOs) within clinical practice (e.g. Law & Wolpert, 2014).

1.12.3.5. Lack of Mixed-Methods Research

Finally, none of the studies have used conjunctive qualitative research methodology. Including qualitative methodology within clinical research provides a richer understanding of the process of therapeutic change and is beneficial where there is a strong need for relevance to context. This makes it particularly useful when considering the application of therapeutic interventions within clinic-based settings and can enhance the clinical usefulness and conceptual robustness of the knowledge base (Castonguay, 2011; Malterud, 2001). Binder and colleagues (2016) suggest that qualitative research can be used to explore the *how* and *what* of therapeutic change (Binder, Holgersen and Moltu, 2012), by providing an insight into experience that can contextualise the findings from clinical trials and quantitative process studies concerning potential mechanisms of change.

1.13. Current Research

1.13.1.   <u>Aims</u>

Using a mixed-methodological approach, the current study aims to examine the usefulness of group MBCT within an Enhanced Primary Care Mental Health Service (PCMHS). The study aims to address some of the shortcomings of previous research by including people with a wide range of diagnoses and co-morbid difficulties with minimal exclusion criteria.

A further aim is to examine the effect of MBCT on a wide range of identified transdiagnostic processes, as measured by the CBP-Q and measures of mindfulness, psychological flexibility and reorganisation of conflict, to further understand how the intervention produces beneficial outcomes in this population. A GBO, as well as symptom and process-based outcomes, will be used to elucidate a more holistic understanding of meaningful therapeutic change.

Finally, qualitative interviews will be employed to further understand the experience of change as a result of the group. A further goal of both the social enterprise and the service was to identify which elements of the group participants found more or less helpful.

1.13.2.   <u>Research Questions</u>

Within a transdiagnostic clinical group;

1. Does MBCT reduce scores on symptom-based outcome measures?
2. Does MBCT decrease scores on the Cognitive Behavioural Processes Questionnaire?
3. Does MBCT decrease scores on the Acceptance and Action Questionnaire-II?
4. Does MBCT increase scores on Five Factor Mindfulness Questionnaire?
5. Does MBCT increase scores on the Reorganisation of Conflict Scale?
6. Do participants move closer to valued outcome goals following MBCT?

Following the MBCT group;

1. How do participants describe their experience of change?
2. What aspects do participants find helpful or unhelpful?

2. METHOD

2.1. Chapter Overview

The following chapter outlines the epistemological stance and describes the sample population, study design, materials, procedure and analytic strategy for phase I (quantitative) and phase II (qualitative) of the study. Finally, the main ethical considerations of the research will be discussed.

2.2. Epistemology

The current research is embedded within a critical realist epistemology and ontology. Onotological positions are concerned with the essence of "being" and what exists, whilst epistemological positions make claims about the nature of knowledge and what can be known. Critical realism has foundations in Bhaskar's philosophies of "transcendental realism" in science and "critical naturalism" in human science (e.g. Bhaskar & Lawson, 1998). Underlying the methodology and focus of this research is the assumption that human distress, wellbeing and therapeutic change, are ontologically real, actualisable, social events or experiences, albeit, ones that are in a constant state of flux. Whilst existing separately from the constraints of our current theory and language, the nature of these experiences can only be estimated, or understood, through the current constructs that are used to define them.

It is proposed that the dominant diagnostic and symptom-based constructs used to define distress, wellbeing and change, are insufficient in understanding the true nature of these experiences. The transdiagnostic and transprocess perspective provides an alternative account of human distress and therapeutic change that is explored in this study through the use of process-based measures. The processes studied are, from a realist perspective, considered to be actual experiences that exist independently of our knowledge about them. However, it is acknowledged that our ability to understand these processes is limited by our theoretical constructions and the measures used to study them, which may evolve over time. In line with a critical philosophical stance, the

current study seeks to develop a more holistic understanding of meaningful therapeutic change through the use of GBOs and qualitative interviews.

2.3. Design

A mixed-methods approach was adopted using both quantitative (phase 1) and qualitative (phase 2) methods of data collection and analysis (Johnson, Onwuegbuzie, & Turner, 2007).

The current research was a preliminary pilot study. The first phase of the study adopted a small-N, AB with follow-up design (Bloom, Fischer & Orme, 2009). Baseline measures were collected at the beginning of the first group session and each subsequent session. Demographic data was collected on week one, four and eight to establish the impact of confounding variables, such as living circumstances and social support, on observed outcomes.

The second, qualitative, phase of the study employed semi-structured interviews to further understand the process of "therapeutic change".

2.4. Participants

2.4.1. Population Sample

The sample was selected from an inner-city adult PCMHS, which supports transitions from secondary to primary care services. SUs within the PCMHS are diagnosed with long term and/or severe mental health problems and have psychological, medical or social needs over and above that which would ordinarily be provided by their GP.

2.4.2. Inclusion Criteria

Inclusion criteria were broad, in line with the potential transdiagnostic benefits of MBCT. Participants were required to currently be under the care of the Enhanced PCMHS and able to understand material presented in the Participant Information Sheet (PIS), with support from the researcher if needed.

2.4.3. Exclusion Criteria

Participants were ineligible if there were deemed to be a risk either to themselves or others and/or those who were unable to understand and provide informed consent to participate in the group.

2.4.4. Participant Identification and Recruitment

Potential participants, who met the eligibility criteria, were identified and approached opportunistically, by Senior Nurse Practitioners (SNPs) within the team, who provided them with a brief information leaflet about the study (Appendix 3). Those who expressed interest in taking part were contacted by the researcher who provided detailed information about the study and answered initial questions. The Participant Information Sheet (Appendix 4), dates and times of the group session, and contact details of the mindfulness teacher were sent to those who verbally agreed to participate. Written consent forms (Appendix 5) were signed on the first day of the group.

2.4.5. Sample Size

Literature recommends group sizes of twelve for MBCT (Segal et al., 2012); however, the study aimed to recruit approximately eighteen participants for the group to account for potential drop-outs (Swift & Greenberg, 2012).

2.5. Materials

2.5.1. Demographic Questionnaire

A demographic questionnaire (Appendix 6) was designed both to describe the sample and to understand the impact of extraneous variables, such as satisfaction with level and quality of social support and living circumstances (e.g. Vandervoort, 1999; World Health Organisation, 2014).

2.5.2. Goal-Based Outcome

A goal-based outcome questionnaire (e.g. Law & Wolpert, 2014) was developed (Appendix 7), which included two 10-point Likert scale questions to capture participants' perceived closeness to personally defined goals and perceived helpfulness of the group in allowing them to move towards those valued outcomes. Higher scores indicated a greater degree of closeness to valued outcomes.

2.5.3. Validated Questionnaires (Appendix 8)

2.5.3.1. Symptom-based measures

Permission was sought and granted to include measures that were not freely available. Measures were selected based on good psychometric properties and validation within clinical and non-clinical populations. Brief measures were selected where possible, in order to minimise the burden on participants.

Table 2: Symptom-Based Measures

Measure (author/s)	Description	Psychometric Properties
Patient Health Questionnaire- 9 PHQ-9; (Kronke, Spitzer & Williams, 2001)	A 9-item self-report questionnaire, measuring symptoms of depression. Items are rated from 0 (not at all) to 3 (nearly every day) with a total range of 0-27. Total scores are calculated as a sum of all items. Higher scores indicate greater severity of depression.	Internal consistency (Cronbachs α= 0.89 and 0.86) sensitivity (88%) specificity (88%).
Generalised Anxiety Disorder Questionnaire-7 GAD-7; (Spitzer, Kronke, Williams, &Lowe, 2006)	A 7-item, self-report questionnaire for screening and measuring the severity of generalized anxiety. Items are rated from 0 (not at all) to 3 (nearly every day), with scores ranging from 0-21. Total scores are calculated as a sum of all items. Higher scores indicate greater severity of generalized anxiety.	Internal consistency (Cronbachs α= 0.92), sensitivity= 89%, and specificity= 82%.
The Fear Questionnaire FQ; (Mark & Matthews, 1979)	A 25-item, self-report measure assessing phobic concerns, including agoraphobia, social phobia and blood phobia. Items are rated on a scale from 0-8 regarding levels of, avoidance, pervasiveness and distress. Total phobia scores are calculated as the total of items 2-16 and range between 0-120. Higher scores indicate greater avoidance and distress.	Internal consistency (Cronbach's α= 0.82-0.96 (Mark & Matthews, 1979) sensitivity (62-67%) (Oei, Moylan, & Evnas, 1991; Moylan & Oei, 1992)
Obsessions and Compulsions Inventory- Revised OCI-R; (Foa et al., 2002)	An 18-item, self-report measure comprising of six subscales for assessing distress caused by obsessive compulsive symptoms. Items are rated on a 5-point scale ranging from 0 (not at all) to 4 ("extremely"), with total scores	Internal consistency (Cronbach's α= 0.81-0.93), sensitivity (65.6%) specificity (63.9)

	ranging between 0-72. Total scores are calculated as a sum of all items. Higher scores indicate greater distress.	
Revised Impact of Events Scale IES-R; (Weiss & Marmer, 1996)	A 22-item self-report measure that assesses subjective distress caused by traumatic events. Items are rated on a 5-point scale ranging from 0 ("not at all") to 4 ("extremely") and total scores range from 0-88. Total scores are calculated as a sum of all items. Higher scores reflect greater distress.	Internal consistency (Cronbach's α= 0.96) sensitivity (91%) specificity (82%) (Creamer, Bell, & Falla, 2003).
Mobility Inventory Questionnaire for Agoraphobia MI; (Chambless et al., 1985)	A 26-item, self-report measure, which includes two agoraphobic avoidance scales. Respondents rate items on a 5- point scale ranging from 1 ("never avoid") to 5 ("always avoid"), average scores are obtained for each subscale. Higher scores indicating greater avoidance	Internal consistency (Cronbach's α = 0.96 "avoidance alone"; 0.95 "avoidance accompanied"), sensitivity (87%) specificity (73%) (Chambless et al., 2011).
Panic Disorder Symptom Severity PDSS; (Shear et al., 1997)	A 7-item scale used to detect possible symptoms of panic. Respondents rate 7 items on a 5-point scale ranging from 0-4. Total scores are calculated as a sum of all scales. Higher scores reflect higher levels of panic.	Internal consistency (Cronbach's α= 0.88) sensitivity (83.3%) specificity (64%) (Shear et al., 2001)
Short Health Anxiety Inventory SHAI; (Salkovskis et al., 2002)	A 14-item self-report measure of health anxiety. Items are scored from 0-4. Total scores are calculated as a sum of all items. Higher total scores (range 0-56) reflect increased health anxiety.	Internal consistency Cronbach's α= 0.89, sensitivity= 85.7%, specificity= 77.9%.
The Eating Attitudes Test-26 EAT-26; (Garner & Garfunkel, 1979)	A 26-item screening measure for anorexia nervosa, and global measure of eating concerns. Items are rated on a 6-point scale (ranging from 0-3) with a total score ranging from 0-78 across subscales of dieting and bulimia, food preoccupation and oral control. Total scores are calculated as a sum of all items. Higher scores reflecting greater severity.	Internal consistency (Cronbach's α= 0.89-0.93), sensitivity= 80%, specificity= 78.8%.
Cardiff Anomalous Perceptions Scale CAPS; (Bell, Halligan, & Ellis, 2006)	A 32-item, self-report questionnaire measuring anomalous experiences (e.g. hallucinations). Respondents indicate the presence or absence of various anomalous experiences. Endorsed items are then rated on a 5-point scale assessing distress, intrusiveness, and frequency of anomalous experiences. Total scores for each subscale are calculated as a sum of all items.	Internal consistency (Cronbach's α= 0.87), good construct, convergent, discriminant and criterion validity.
Peter's Delusion Inventory PDI; (Peters, Joseph, Day, & Garety, 2004):	A 21-item self-report measure that assesses delusional beliefs. Respondents first rate the presence or absence of various types of delusions (e.g. grandiosity, persecution). Each endorsed item is then rated on a 5-point scale assessing distress, preoccupation and conviction. Total scores for each subscale are calculated as a sum of all items.	Internal consistency (Cronbach's α= 0.82 and 0.90), convergent validity with Delusions Symptoms States Inventory, r= 0.61 p<0.001

2.5.3.2 Process-based Measures

- **The Cognitive Behavioural Processes Questionnaire (CBP-Q)**: Patel, Mansell and Veale, 2010). The CBP-Q is a 12-item scale that uses the semantic differential technique to measure engagement in cognitive (internal) and behavioural processes. Respondents rate degree of engagement in processes on a 9-point Likert scale. Higher scores indicate increased engagement in processes. The scale has good internal consistency, in transdiagnostic clinical (Cronbach's *α = .92)* and non-clinical (Cronbachs α= 0.90) samples, and has strong correlations with a range of symptom and process-based questionnaires.

  Example item: "How much have you looked for possible harm or threats in your surroundings when feeling bad, rather than just noticing things around you?" 0 = Always looked for threats, 8 = Always just noticed things around you.

- **The Five Facet Mindfulness Questionnaire** (FFMQ-15): *Baer, Carmody and Husinger, 2012.* The FFMQ is 15-item measure of "mindfulness" or "flexible awareness". Items are measured on a 5-point Likert scale. The scale consists of 5 subscales: Non-Reactivity to Inner Experience, Observing/Noticing, Acting with Awareness, Describing, and Non-Judging of Experience. The total score reflects a global measure of mindfulness and psychological flexibility with higher scores indicating increased mindfulness. The scale has good internal consistency (Cronbach's α= 0.64-0.80 pre-MBCT intervention, 0.69-0.83 post-MBCT) and sensitivity to change in clinical populations (Gu et al., 2016).

  Example item: "I watch my feelings without getting carried away by them". 1= never or very rarely true, 5 (very often or always true).

- **Acceptance and Action Questionnaire- II** (AAQ-II; *Bond et al., 2011).* The AAQ-II is a 7-item measure of "experiential avoidance" and psychological flexibility. Items are scored on a 7-point Likert scale, with

higher scores indicating greater psychological inflexibility or experiential avoidance. This short version of the AAQ has better psychometric consistency in comparison to the previous 39-item AAQ, with improved internal consistency Cronbach's α= 0.84, (0.78-0.88), good test-retest reliability at 3 (0.89) and 12 months (0.71), and good concurrent, predictive, discriminant, convergent, and incremental validity, within college and clinical samples.

> *Example item: "I'm afraid of my feelings." 1= "Never true", 7= "Always true."*

- **Reorganisation of Conflict Subscale** (RoC subscale; *Higginson, 2008).* The Reorganisation of Conflict Subscale is an 11-item scale measuring the capacity for reorganisation of conflict. Respondents indicate how much they believe each item to be true (out of 100) with higher scores reflecting lower levels of "control". The subscale is taken from the full Reorganisation of Conflict Scale, which also included subscales of "inflexible and urgent problem-solving" and "recognition of goal conflict". The full RoC was examined in non-clinical populations, and a mixed mental health sample (Bird, 2013; Higginson, 2008). Only the components of Reorganisation of Conflict subscale demonstrated satisfactory psychometric properties (Bird, 2013). The briefer RoC subscale, was therefore selected due to its more stable factor structure and its brevity.

> *Example item: "When I consider a problem, I later become aware that I hadn't thought about it in that way before" 0= don't believe this at all, 100= believe this completely*

2.5.4. Interview schedule

The interview schedule was used to guide the semi-structured interviews. (Appendix 9). The schedule was loosely structured and used open-ended questions to allow for an in-depth understanding of participants' experience of "change" as a result of the group (Patton, 2002). Questions about aspects of the group that participants found more or less helpful in achieving the change that they hoped for, their experience of change and other factors that might influence this change, provided opportunities for further, follow-up questions.

2.6. Phase I Procedure

2.6.1. The MBCT group

The MBCT group was facilitated by an accredited MBCT teacher from the BeingWell who was selected based on previous experience of working with clinical populations, including those diagnosed with psychosis.

The group ran once a week for eight-weeks with a four-week follow-up session. Each session lasted for an hour and a half. The content of sessions drew on the MBCT group skills-training manual (Segal et al., 2002), considering adaptations for psychosis (Chadwick, 2006) such as reduced session length. Sessions focused on teaching increased, non-judgemental awareness of bodily sensations, thoughts, and feelings and experiential home practice was set each week to promote the acquisition of mindfulness skills.

2.6.2. Data Collection

All measures were administered by the researcher, half an hour before the beginning of each group, to allow time for completion and provide an opportunity to ask questions.

Detailed demographic information was administered at baseline (week 1), week 4, week 8 and at follow-up. Full sets of symptom-based measures, covering all difficulties experienced by participants, were also administered on week 1, 4, 8 and at follow-up, and were tailored to participants' presenting problems. Thus,

participants only completed measures (Table 2) for psychological problems that they reported experiencing. Goal-based, process-based and "primary" symptom-based measures (the disorder identified as being the most problematic), were administered on a weekly basis.

2.7. Quantitative Analytic Strategy

Individual-level differences were analysed using a small-N approach. Quantitative data was presented in graphs and for visual inspection of the level, trend, slope and variability within the data, for each participant. Visual analysis employs both quantitative methods and investigator judgements of patterns within the data (Horner et al., 2005). Judgements were based on consistency of patterns within the data and the rate and extent of change observed. This approach focuses on individual-level changes, and provides ongoing information regarding the impact of group MBCT on various outcome measures (Zhan & Ottenbacher, 2001).

2.8. Phase II Procedure

2.8.1. Recruitment

Participants who attended at least three sessions of the group were invited to attend a one-to-one interview. Information sheets (Appendix 10) were handed out in the final group session and separate consent forms (Appendix 11) were completed on the day of the interview, which included a statement to acknowledge that the interviews would be audio recorded.

Participants either contacted the researcher to express interest in taking part, or were contacted by the researcher approximately four days after the final group session.

2.8.2. Interviews

Qualitative interviews took place at the main service site, and were audio recorded. Interviews were scheduled for 60 minutes, but participants were

reminded that the duration of the interview would be dictated by them (e.g. could be shorter). Participants were debriefed at the end of each interview and were given a £10 Love2Shop voucher to show appreciation for their time.

2.9. Qualitative Analytic Strategy

Qualitative data was transcribed systematically and analysed using thematic analysis, following phases in Braun & Clarke (2006) to ensure quality.
A combination of inductive (bottom up) and deductive (top-down) strategies were employed, however analysis of semantic content was the primary analytic strategy

2.9.1. Phase 1: Familiarisation with the Data.

Verbatim transcription of audio recordings was the first stage of familiarisation with the data and is seen as an interpretive act (Lapadat & Lindsey, 1999). Immersion was achieved re-reading transcripts and re-listening to audio recordings, whilst making notes of patterns within the data and generating ideas for initial codes.

2.9.2. Phase 2: Generating initial Codes.

Using NVivo, data was coded systematically into the most basic segments of meaningful analysis based on semantic content. Data was coded for as many themes as possible and extracts were coded under several themes where relevant. Extracts were coded inclusively, keeping some surrounding content, to ensure that the context of data remained intact.

2.9.3. Phase 3: Searching for Themes.

Initial lists of codes were then organised into broader, overarching themes and subthemes using visual mind maps and tables.

2.9.4. Phase 4: Reviewing Themes.

Refinement of themes involved examination of the internal homogeneity and external heterogeneity (Patton, 1990). Coded extracts under each theme and subtheme were checked for consistency and were rearranged accordingly. This

formed initial thematic maps (see Appendix 12) The entire data set was then re-read to consider the validity of themes, and the thematic map as a whole, and to code additional relevant data that may have been missed.

2.9.5. Phase 5: Defining and Naming Themes.

Once a satisfactory thematic map was established, themes were defined and refined. Data extracts for each theme and subtheme were analysed and organised into an internally consistent and coherent narrative of the data, and checked against the overall story of the data. Themes were shared with the project supervisor and relabeled to ensure that these were concise and accurately reflected the data.

2.9.6. Phase 6: Producing the Report.

In writing the final report the story of the data was told and evidence provided through careful selection of extracts that vividly described the data and captured the essence of the theme. In the report analysis at the semantic level involved moving from descriptive to interpretive accounts of the data.

2.10. Ethical Considerations

The study underwent a full NHS Ethics Review and was granted approval in November 2017 (see Appendix 13). Ethical considerations centred on issues of informed consent, confidentiality, research integrity and the potential risks and benefits to participants.

2.10.1 Equality of Access

2.10.1.1. Recruitment
Potential participants were identified through nurses within the service. To ensure that the group and study were promoting equitably to SUs, nurses were consulted prior to the commencement of recruitment with regards to the eligibility criteria, and were advised to offer the group to all those meeting eligibility criteria.

2.10.1.2. Language Barriers
Although the study aimed to include as many SUs as possible, participants were required to understand the PIS and provide informed consent, given appropriate support. Thus, participants who had very little understanding of, or ability to speak English, were excluded from the research. Whilst the ethical implications of excluding these potential participants was acknowledged, the benefits of group practices and discussions would have been significantly limited for these participants. Furthermore, resource and practical limitations meant that it was not possible to employ interpreters for the group.

2.10.2. Informed Consent

Participants were provided with detailed information sheets for each phase of the study, which outlined the aims, procedure, risks and benefits of the study and any information that might impact their decision to participate. Contact details of the researcher and supervisor were provided and participants were asked to sign a consent form to confirm that they had understood the information and were willing to take part. A statement of participants' rights to withdraw from the research and/or group at any time, without impact on their care, was also included. Participants maintained the right to withdraw their data until the point at which the was analysed.

2.10.3. Confidentiality

2.10.3.1. Confidentiality of participant data
Confidentiality of participant data was ensured at every stage of the research process. Anonymity was upheld through the use of participant numbers on measures completed and identifiable information was stored separately from research data.

Qualitative interviews were audio recorded and transcribed into Word documents. The transcripts omitted identifiable information and names were replaced with pseudonyms to protect identities. Unidentifiable extracts from interviews were used in the final report and subsequent publications, which was outlined in the information sheet.

2.10.3.2. Confidentiality within the group
Group members were not legally bound to maintain confidentiality in the same way as the researchers and group facilitator. To increase the likelihood that confidentiality would be upheld, participants were asked to collaboratively define confidentiality within the first session and signed an agreement to acknowledge, respect and protect confidentiality. Circumstances in which the group facilitator would have broken confidentiality, in accordance with Trust policy, were outlined on the information sheets and consent forms.

2.10.4. Data Storage and Transfer

2.10.4.1. Paper-based data storage
Research data (including demographic data and measures) and identifiable information, such as signed consent forms, were stored in separate locked cabinets within a locked office at the University of East London until scanned and uploaded onto a password protected computer, at which point they were destroyed.

2.10.4.2. Audio recordings
Audio recordings were transferred onto an encrypted storage device (USB), immediately after the interviews took place and were deleted from the recorder. Once transcribed, all audio recordings were deleted.

2.10.4.3. Electronic data storage
Electronic and audio files containing research data and interviews were stored on a secure password protected computer file. Transfer of data was kept to a minimum and when necessary, was done so using an encrypted storage device (USB). Only the researcher and supervisor had access to this. The data will be stored for a maximum of 5 years following which all files will be destroyed.

2.10.5 Avoidance of Harm

2.10.5.1. Ineligibility
Although no participant was deemed ineligible at screening, this was a possibility and may have led to distress or a sense of injustice. In this case, SUs would have been provided with a full explanation of the reasons for ineligibility and given the opportunity to ask questions regarding the decision.

2.10.5.2. Group format

The research recruited SUs who were experiencing a range of psychological difficulties (including depression, anxiety and psychosis). MBCT has been shown to be effective for these difficulties, however this was the first MBCT group to be delivered in a broad transdiagnostic format. Thus, the facilitator was selected based on previous experience working with severe and enduring mental health problems, including psychosis, to ensure that participants' progress was routinely monitored throughout the group. Appropriate adaptations to the MBCT protocol were also made (as outlined above).

2.10.5.3. Meditation practices

Meditation practices require awareness of pleasant and unpleasant internal experiences. However, any discomfort or distress experienced during meditation tends to temporary and learning to manage these experiences ultimately improves well-being. Nevertheless, participants were encouraged to respect their personal limits during sessions. In-session practices were followed by facilitated discussion to help participants make sense of what they noticed during the exercise and detailed guidance was provided for home practices.

A SNP was available on site during the group and participants were encouraged to speak to their nurse outside of the group if they felt distressed. The contact details of the research team were provided, as well as details of supporting agencies.

2.10.5.4. Interpersonal conflict

Conflict may have arisen within the group, which could have been disruptive and distressing for participants. This was managed prospectively through collaborative establishment of "ground rules" and through recruitment of an experienced group facilitator.

2.10.5.5. Measures

It is possible that measures and interview questions may have been be perceived as intrusive or upsetting. This was not expected to exceed that which the participant might experience during routine clinical practice. However, participants were provided with full information about the study and contact details of the research team and the mindfulness teacher, to ask any questions

about potential risks or issues of taking part. Details of supporting agencies were also provided at the start and end of the study.

The measures and questionnaires used were not of a sensitive nature. However, participants maintained the right not to answer a question if they felt embarrassed or were reluctant to disclose particular information.

2.10.6. Burden

2.10.6.1. Measures
In order to minimise burden, short-form questionnaires were selected where possible and half an hour was allocated to completing measures. Participants also had the opportunity to take measures home and complete them in the evening or morning before each session.

2.10.6.2. Travel
Participants were not reimbursed for their travel to the group sessions due to a lack of resources. Whilst this may have been a barrier to accessing the group, most SUs lived locally and attended other group sessions within the service.

3.0. RESULTS

3.1. Chapter Overview

The following chapter describes the findings of the study. The study sample and group attendance will be outlined followed by analysis of the quantitative and qualitative data.

3.2. Describing the Sample

Nine participants were initially approached and recruited to take part in the study, however, only six attended the first session and were considered treatment "starters". All six participants completed the group. Table 3 outlines demographic variables of the sample. Participants came from diverse ethnic backgrounds and ranged between the ages of 31 to 63. No men attended the group, although two men were initially recruited to take part.

Table 3: Demographic Variables

p	Age	Gender	Ethnicity	Employment	Diagnoses	Self-Reported MHP / Diagnoses	Duration MHP (years)	Number of Times Psychological Help Sought
1	63	Female	Indian	Not employed	Anxiety and Depression	GAD, Depression, PTSD	2	3
2	31	Female	Bangladeshi	Not employed	Mixed Anxiety and Depression	Auditory Hallucinations, GAD, Depression, PTSD, Panic, OCD, Specific Phobia	6	*not specified*
3	40	Female	Mixed: English-Filipino	Employed-secretary	Bipolar Disorder, Anxiety and Depression,	GAD, Depression, Panic	> 20	10
4	40	Female	White British	Employed-team leader	Anxiety with Depression	GAD, Depression, Panic	> 20	*not specified*
5	56	Female	White British	Not employed	Depression	Depression, GAD	> 30	*not specified*
6	32	Female	Asian	Not employed	Anxiety and Depression	GAD, PTSD	*not specified*	*not specified*

3.3. Group Attendance

Participants attended an average of 5.3 of the eight group sessions, ranging between four and seven sessions. Three participants attended the follow-up session (participant 1, 3 and 7). All participants reported finding the group useful in moving towards valued outcomes.

3.4. Quantitative Data: visual inspection

Visual inspection of quantitative data considered four aspects; trend, slope, level and variability. Initial inspection indicated that there was little change in process and symptom-based measures and self-reported ratings of satisfaction with living situation, the amount and type of support received, closeness to achieving self-defined goals and the usefulness of the group. It was therefore concluded that statistical analyses, which frequently complements visual inspection, would not be appropriate here, (see Appendix 13 for raw figures).

3.4.1. Participant 1
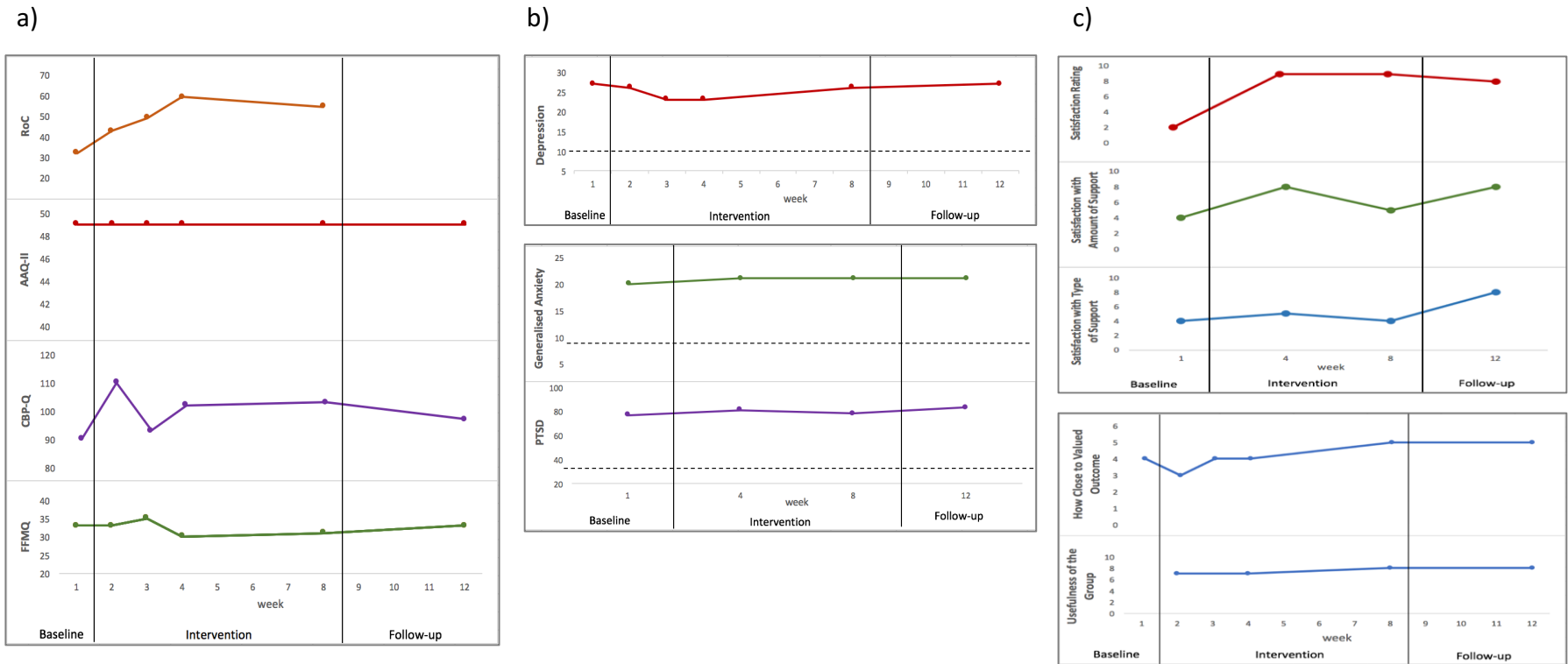
Figure 1: Participant 1 total scores on a) Process-based measures (ROC, Reorganisation of conflict scale; AAQ-II, Acceptance and Action Questionnaire; CBP-Q, Cognitive and Behavioural Processes Questionnaire and FFMQ. Five-Factor Mindfulness Questionnaire), b) Symptom-Based Measures (including clinical cut-off points), c) Self-report demographic and Goal-Based Measures.

3.4.1.1. Process-Based Measures

There was an increase in total score on the RoC scale over the course of the group, implying that reorganisation took place. This occurred at a steady rate between session 1 and session 4 and was maintained over the course of the group. In contrast, there was no apparent change in total scores on the AAQ, CBP-Q or the FFMQ, which all remained high.

3.4.1.2. Symptom-Based Measures

There were also no notable changes on symptom-based measures of depression, generalised anxiety or PTSD, which also remained high.

3.4.1.3. Satisfaction and Goal-Based Outcomes

Satisfaction with their living situation increased from 2 to 8-points, mirroring changes on the RoC between sessions 1 and 4. Satisfaction with the amount and type of support received from others increased from 4 to 8-points between baseline and follow-up, although there was variability in scores over the course of the group. There was also a one-point increase on closeness to valued outcome over the course of the intervention. Ratings of how useful the group was in achieving their valued-outcome remained high during the group and at follow-up.

3.4.2. Participant 2
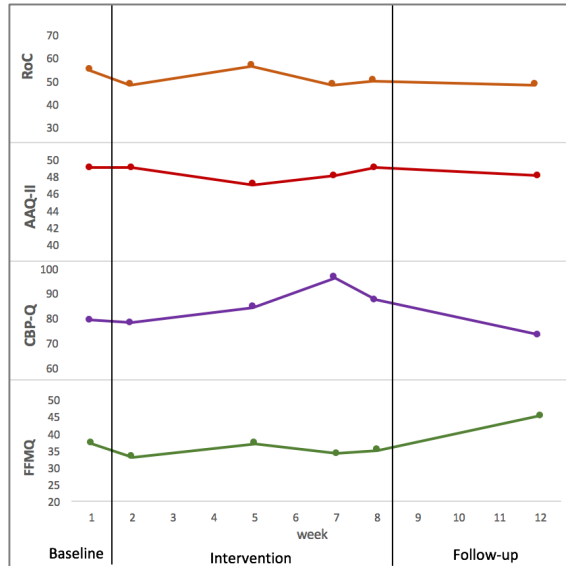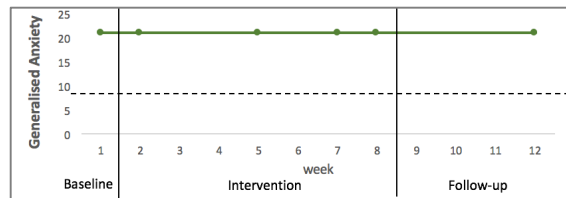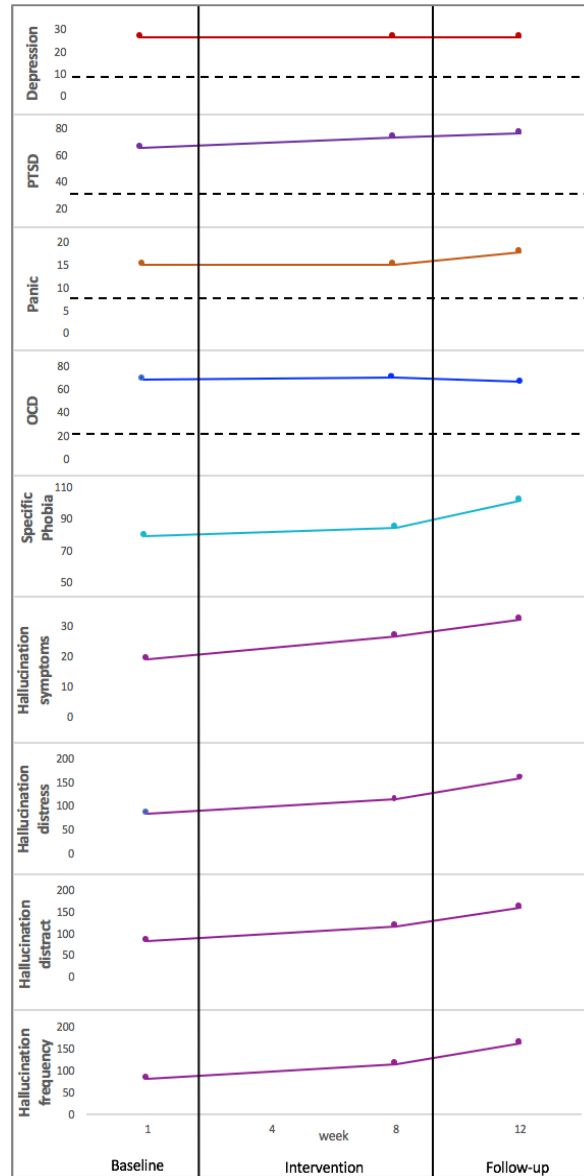
Figure 2: Participant 2 total scores on a) Process-based measures (ROC AAQ-II, CBP-Q and FFMQ), b) Symptom-Based Measures (including clinical cut-offs where available), c) Self-report demographic and Goal-Based Measures.

3.4.2.1. Process-Based Measures
 There was a slight increase (7-points) in total scores on the FFMQ, between baseline and follow-up, indicating increased mindfulness. Scores on the CBPQ decreased by 6-points from baseline to follow-up despite an increase at week seven, which suggests decreased engagement with cognitive and behavioural processes associated with distress. Scores on the AAQ and RoC did not demonstrate notable change over the course of the intervention.

3.4.2.2. Symptom-Based Measures
 There were no changes in total scores on symptom-based measures of depression or anxiety, which remained high. Total scores on the OCI-R decreased by 3-points from baseline to follow-up, despite an initial increase between week 1 and week 8. Conversely, there was an increase in scores between baseline and follow-up on measures of specific phobia (26-points), panic (0.38-points) and the number (13-points), distress (76-points), distraction (76-points) and frequency (80-points) of hallucinations.

3.4.2.3. Satisfaction and Goal-Based Outcomes
There was no change on self-reported satisfaction with the amount and type of support received, however, there was a notable increase in satisfaction with living circumstances between session 1 and 8, with only a slight decrease at follow-up. This coincided with a slight decrease in closeness to valued outcome from baseline to follow-up (1-point), although ratings of usefulness of the group remained relatively stable.

3.4.3. Participant 3

a)
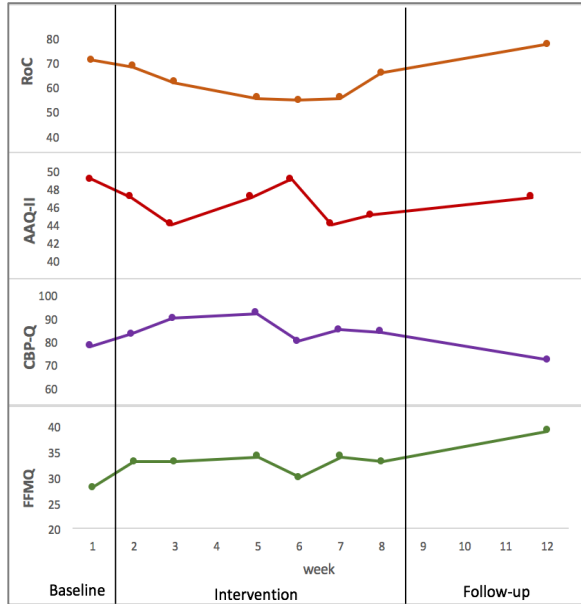
b)
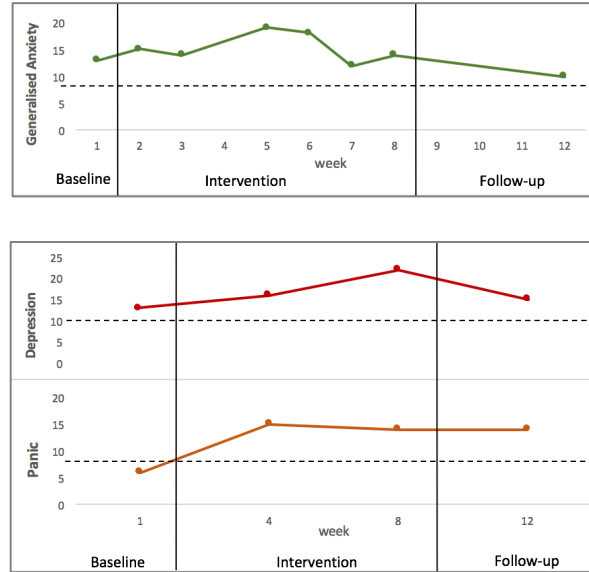
c)
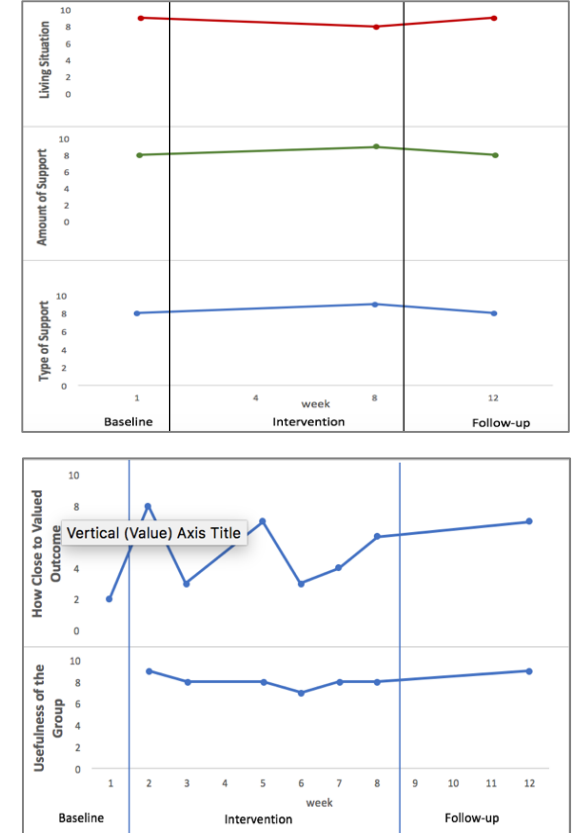
Figure 3: Participant 3 total scores on a) Process-based measures (ROC AAQ-II, CBP-Q and FFMQ), b) Symptom-Based Measures (including clinical cut-off points), c) Self-report demographic and Goal-Based measures

3.4.3.1. Process-Based Measures
There was an initial decrease in total scores on the RoC between baseline and session 7, followed by a notable increase at follow-up, indicating that reorganisation may have occurred at a later point. Similarly, there was an initial increase in total scores on the CBP-Q, which again decreased at follow-up, resulting in an overall decrease of 6-points, suggesting decreased engagement in cognitive and behavioural processes associated with distress. Scores on the FFMQ increased somewhat steadily over the sessions, with a greater increase between week 8 and follow-up. Total scores on the AAQ remained high over the course of the group.

3.4.3.2. Symptom-Based Measures
Depression and anxiety levels remained at a moderate level at baseline and follow-up. However, total scores on the GAD increased between baseline and week 5, followed by a decrease in scores, most notably at follow-up. Similarly, scores on the PHQ-9 indicated an initial increase in depression during the group, which again decreased somewhat at follow-up. However, symptoms of panic seemed to increase initially between week 1 and 4, and remained relatively high for the remainder of the group.

3.4.3.3. Satisfaction and Goal-Based Outcomes
Self-reported satisfaction with their living situation and the amount and type of support received from others, remained high over period of the group. Ratings of closeness to valued outcome fluctuated over the course of the group, although a steady increase was observed between week 6 and 8, with a further increase observed at follow-up, which again suggests that change may have occurred later. Ratings of how useful the group was in achieving valued-outcomes remained relatively stable and high throughout.

3.4.4. Participant 4

a)
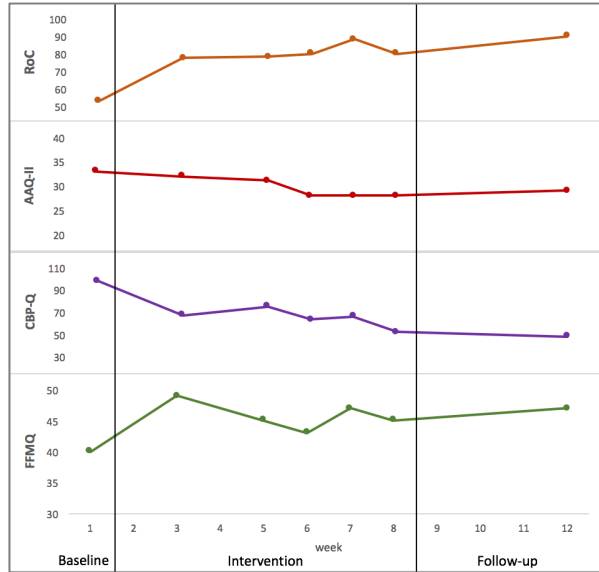
b)
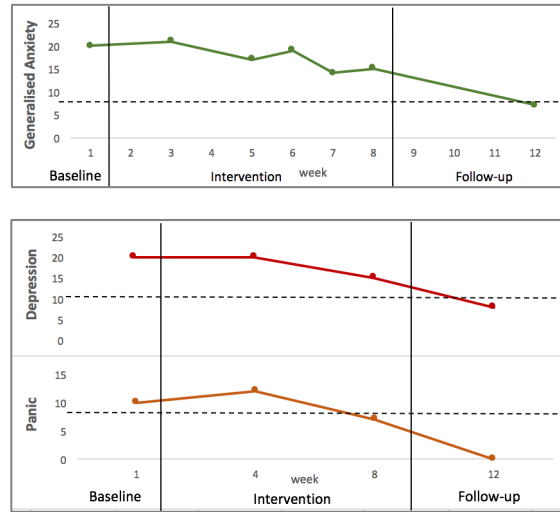
c)
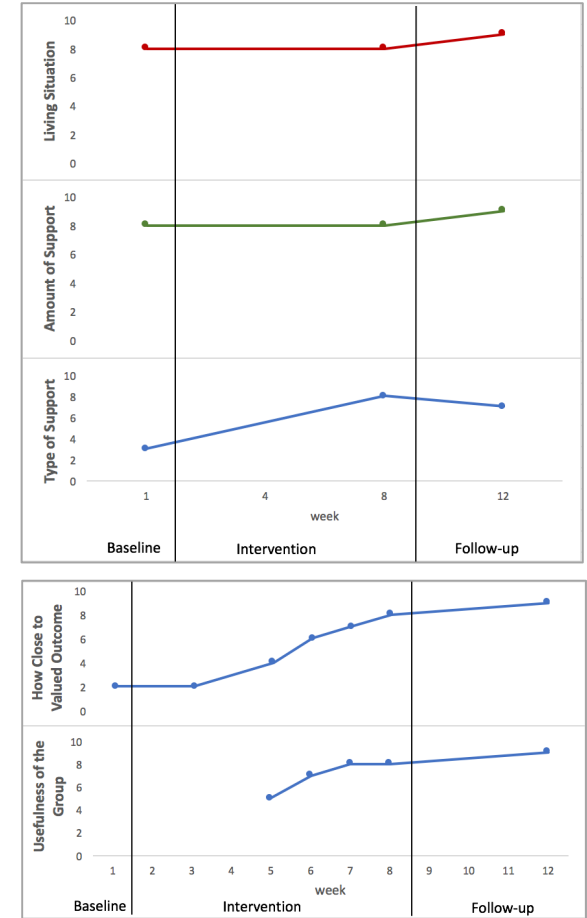
Figure 4: Graphs showing participant 4 total scores on a) Process-based Measures (ROC AAQ-II, CBP-Q and FFMQ), b) Symptom-Based Measures (including clinical cut-off points,) c) Self-report demographic and Goal-Based measures

3.4.4.1. Process-Based Measures

There was a steady increase in total scores on the RoC (25.45 points) and a steady decrease in total scores on the CBP-Q (40 points) between baseline and follow-up, which suggests that reorganisation took place over the course of the group, and was accompanied by decreased engagement in cognitive and behavioural processes associated with distress. A slight increase in mindfulness (7-points) was observed, as demonstrated by scores on the FFMQ. There was little change in scores on the AAQ, which remained high.

3.4.4.2. Symptom-Based Measures

Scores symptom-based measures of generalised anxiety, depression decreased from severe to moderate levels over the course of the intervention, with the most prominent decreases occurring at follow-up. Scores on the panic scale fell to 0 at follow-up.

3.4.4.3. Satisfaction and Goal-Based Outcomes

Ratings of closeness to a valued outcome increased steadily by 7-points over the course of the group in line with increases on the RoC and FFMQ and decreases on the CBP-Q and symptom-based outcomes. This was mirrored by a steady increase in ratings of the usefulness of the group. There was also a steady increase in satisfaction with the type of support received from others between baseline and session 8 (6-points), with only a 1-point drop-off at follow-up. Satisfaction with their living situation and the amount of support received remained high over the group.

3.4.5. Participant 5

a)
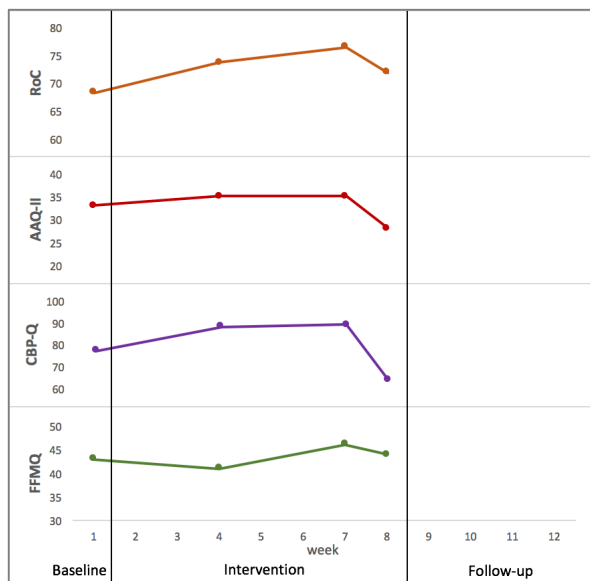
b)
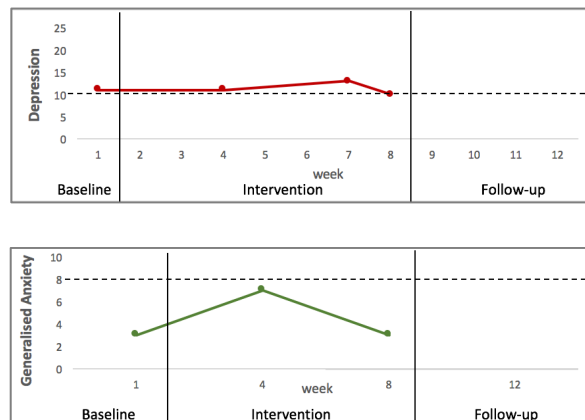
c)
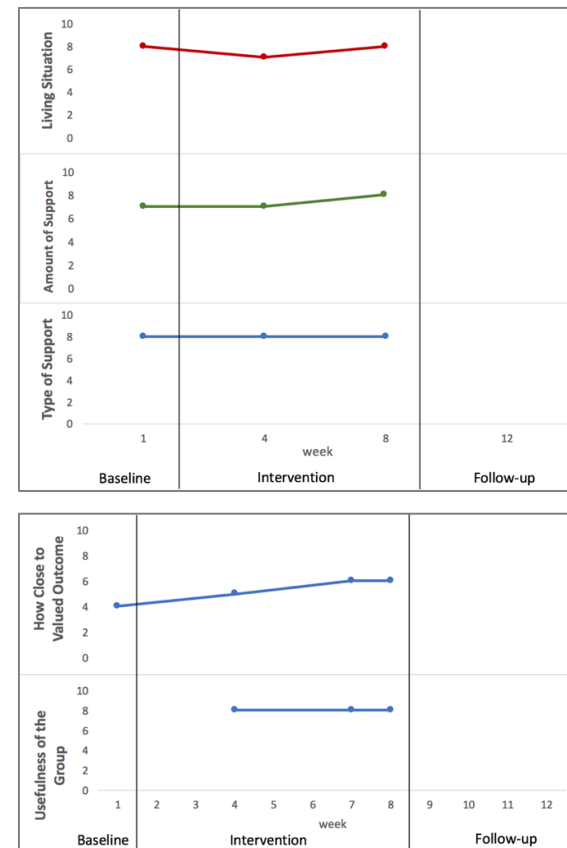
Figure 5: Participant 5 total scores on a) Process-based measures (ROC AAQ-II, CBP-Q and FFMQ), b) Symptom-Based Measures (including clinical cut-off points where available), c) Self-report demographic and Goal-Based measures

3.4.5.1. Process-Based Measures

There was an initial, steady increase of 8.18 points in total scores on the RoC between baseline and week 7 suggesting reorganisation may have been taking place across this period. This coincided with and a slight increase in mindfulness (3-points) on the FFMQ over the same period. However, there was an observed decrease in scores on both measures at week 8. Despite an initial increase in total scores on the AAQ and CBP-Q between baseline and week 7 (2-points and 12-points respectively), a notable decrease on both measures was observed at week 8, resulting in an overall reduction of 5-points and 13-points over the course of the group.

3.4.5.2. Symptom-Based Measures

There was only a 1-point change in scores on the PHQ-9 between baseline and week 8, indicating little change in moderate levels of depression. Similarly, there was no observed change in symptoms of generalised anxiety between baseline and week 8, with scores remaining in the healthy to mild range, despite a slight increase at week 4.

3.4.5.3. Satisfaction and Goal-Based Outcomes

Satisfaction with living circumstances and the amount or type of support received from others remained high between baseline and week 8. Despite little change on other measures, there was a slight increase of 2 points in closeness to the participant's valued outcome between baseline and week 8. The usefulness of the group in achieving this outcome remained consistently high (8) across the attended weeks
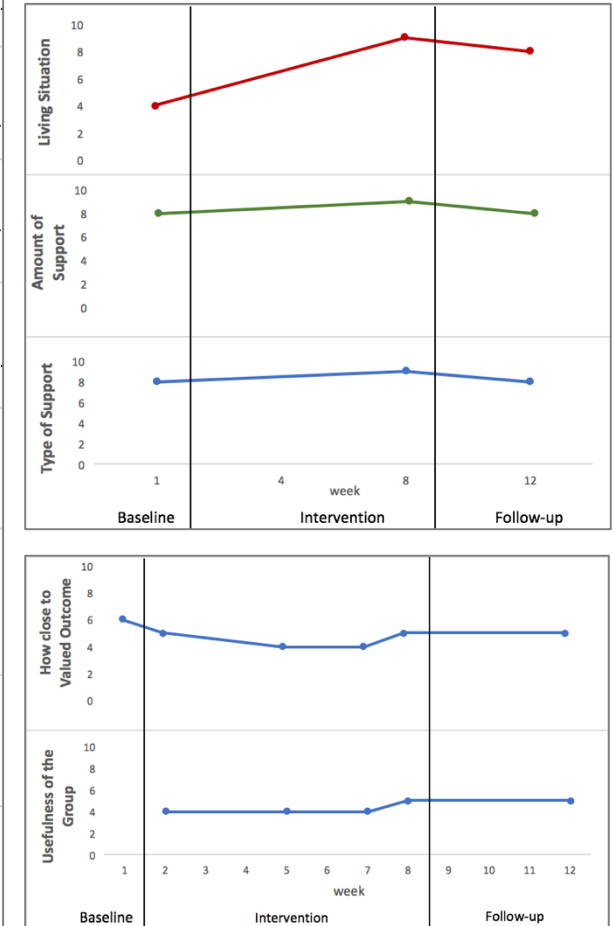
3.4.6. Participant 6
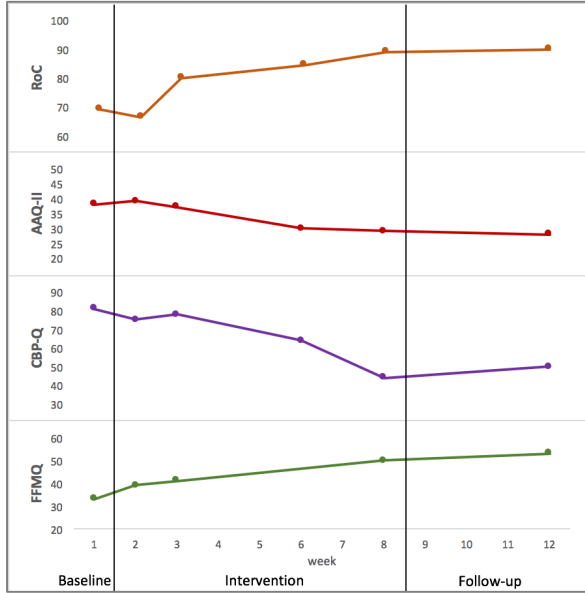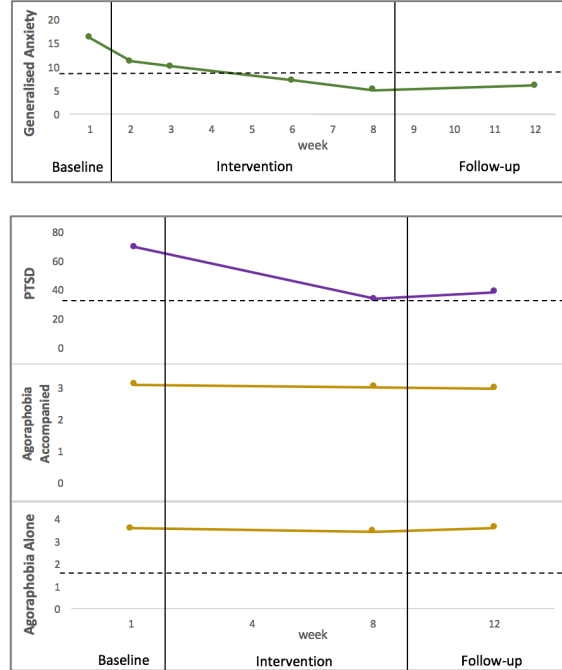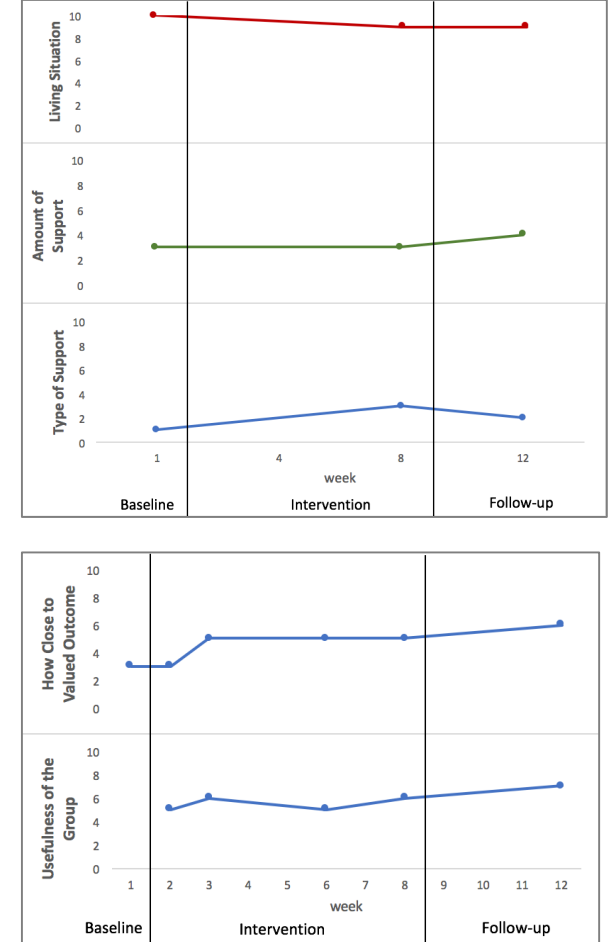
Figure 6: Participant 6 total scores on a) Process-based measures (ROC AAQ-II, CBP-Q and FFMQ), b) Symptom-Based Measures (including clinical cut-off points), c) Self-report demographic and Goal-Based measures

3.4.6.1. Process-Based Measures

Scores on the RoC and FFMQ increased steadily from week 2 to follow-up, indicating a gradual reorganisation of conflict and mindfulness over the course of the group. Similarly, total scores on the CBP-Q decreased steadily between baseline and week 8, implying decreased engagement in cognitive and behavioural processes associated with distress, despite a slight increase at follow-up.

3.4.6.2. Symptom-Based Measures

Scores on the GAD-7 decreased notably between baseline and week 2 and continued to decrease steadily, with only a slight increase (1-point) at follow-up and reflected a shift from severe to mild levels of anxiety. Similarly, symptoms of PTSD also decreased between baseline and week 8, with a slight increase (5-points) at follow-up. Scores on the MI, measuring symptoms of agoraphobia (0.08 and 0.12, showed a very slight decrease between baseline and week 8, with a further decrease on the "accompanied" scale and a slight increase on the "alone" subscale between week 8 and follow-up.

3.4.6.3. Satisfaction and Goal-Based Outcomes

Satisfaction with living situation remained high over the course of the intervention and at follow-up, whilst satisfaction with the amount and type of support received remained low. The participant's perception of how close they were to their valued outcome increased by 2 points between week 2 and 3, mirroring changes on the RoC and remained stable for the rest of the group, increasing again by 1 point at follow-up. Similarly, ratings of how useful the group was in achieving these outcomes remained fairly stable over the course of the intervention with a 1 point increase at follow-up.

3.4.7. Overall Trends in the Data

Examination of trends across measures indicated that there may be a relationship between scores on the RoC, and the CBP-Q. On the whole, as reorganisation of conflict increased, engagement in cognitive and behavioural processes tended to decrease at a similar rate. This also seemed to apply to scores on the FFMQ, although to a lesser extent; scores on the FFMQ tended to increase in line with scores on the RoC and also tended to show an inverse relationship with scores on the CBP-Q. Although no statistical analyses were carried out on the data, a tentative inference could be that, as conflict is resolved, participants tend to engage less in cognitive and behavioural processes associated with distress, which may be related to increased flexible awareness. In some cases, but not all, this also coincided with a decrease in symptomatology. However, it appears that a reduction in symptoms was not a prerequisite for changes on process based measures as evidenced by the apparent lack of trends across process-based and symptom-based measures. Interestingly, despite limited change in scores on symptom-based measures, self-reported closeness to valued outcomes tended to increase over the course of the group, in line with changes on process-based measures (RoC, FFMQ, CBP-Q). This implies that symptom reduction may not be necessary in achieving valued outcomes and that changes in process-based measures may be related to goals.

3.5. Qualitative Analysis

3.5.1. Approach to Analysis

Thematic analysis followed Braun and Clarke's (2006) guidelines. In line with a critical realist perspective, the language used by participants was generally considered to reflect and articulate meaning and experience (Widdicombe & Wooffitt, 1995). The analysis employed a "top-down" and "bottom-up" approach, guided by the initial research questions. Themes were identified using a semantic approach, which involved progression from description of patterns in semantic content to interpretation and of the significance and meaning of patterns (Patton, 1990).

3.5.2. Thematic Map
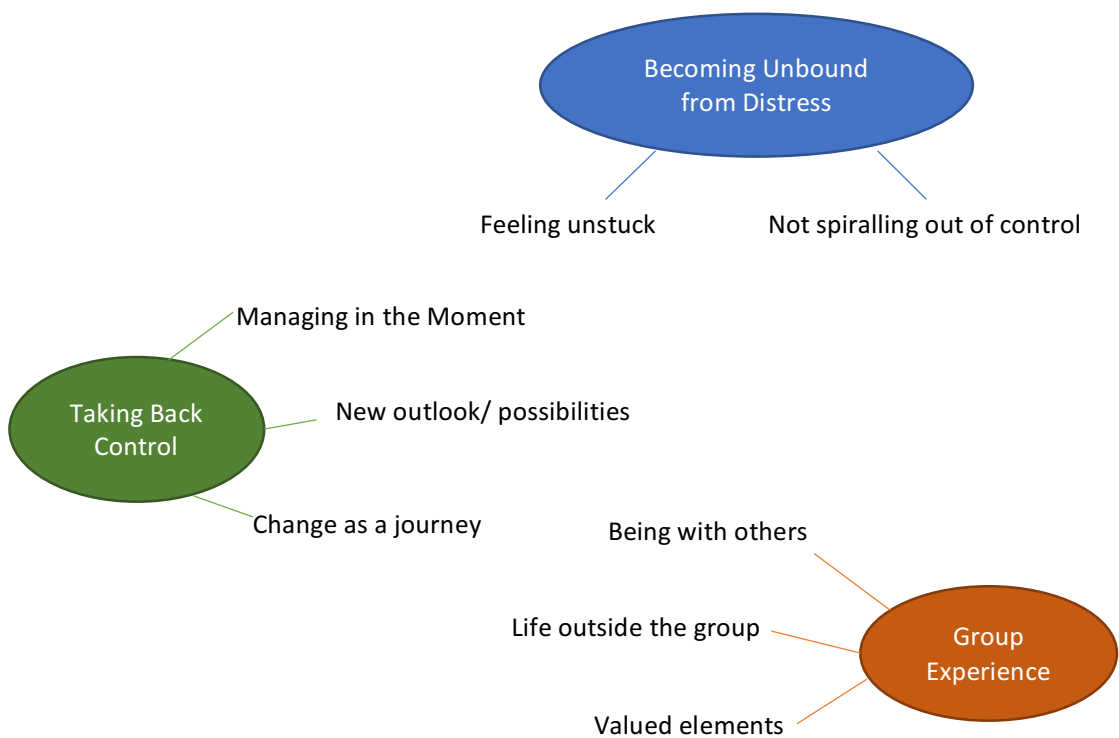
Figure 7: Thematic map depicting themes and sub-themes

3.5.3. Theme 1: Becoming Unbound from Distress

Participants described their distress as a cumulative force that either caused them to become stuck, or to spiral out of control. In both cases, there was a feeling of being bound by their distress, unable to *"get up and do things"* (participant 1) that were meaningful and unable to stop thoughts from "getting away with (them)" (participant 3). Breaking free from these binds seemed to be crucial in allowing participants to find a way out or "get on top" (participant 5) of their difficulties. Being able to recognise and reflect on the binds that were preventing them from reaching their goals provided insight into the shifts that needed to occur, but also appeared to be an important part of becoming unbound from their distress.

3.5.3.1. Subtheme: feeling unstuck
Several participants described distress as a feeling of being stuck. For some, this felt like a "physical thing on you"; a weight or a force that; *"was getting really on top of me"* (participant 1) or a sense of being dragged or "pushed downwards" (participant 5);

> *"it piles up on top of you so you just get pushed down, and then- pushed into mud, erm. Then it, obviously, there's nothing to hold onto and you can't find your way out of it."*
>
> Participant 5

> *"everything was really heavy, and I couldn't hold a thought, and I- and everything was ball and chains and everything was dragging me down."*
>
> Participant 3

Some participants linked this to their external environment. The more internally distressed participants felt, the more neglectful they were of day-to-day activities, allowing things to *"pile up"* (participant 6). In turn, this seemed to "drag" them further down until they were unable to find a way out. Being able to "get on top" of things was therefore an important way of feeling unstuck;

"I think I'm doing it, like, I'm not leaving things, I'm doing thing when I need to do them. Instead of letting it pile up and then getting stressed."

<div align="right">Participant 6</div>

"I think clutter can really drag you down …if I can get on top of all the clutter, that's really helpful."

<div align="right">Participant 5</div>

Others described feeling stuck as going backwards; *"Every time I kept trying, I kept falling back. When I tried and I'm falling back"* *(participant 1).* The nature of this stuckness seemed to be cyclical or a *"turbulent period" (participant 4)*, suggesting a non-linearity in the experience of distress and the process of change that could involve moving forwards or backwards, upwards or downwards or even sideways;

"And the more I thought about it, it went worse, better, worse."; "Every time I kept trying, I kept falling back...And you're just stuck there."

<div align="right">Participant 1</div>

Some participants described feeling stuck in repetitive patterns of thoughts or avoidant behaviour, that seemed to get in the way of meaningful activity. These strategies seemed to be an attempt to relieve uncomfortable feelings, but prevented participants from moving in their preferred directions;

"I don't know what I'm thinking, what I'm feeling miserable about, why I'm not happy. And then I keep asking that question, why? but I don't know myself, why. It's really hard to get that thing out of your mind"

<div align="right">Participant 1</div>

"'cause I isolated myself and I avoided the situation."

<div align="right">Participant 6</div>

In some cases, an inability to break out of these patterns, led to judgmental or critical thoughts, which seemed to compound feelings of distress;

> *"A very long term, like, self-defeating mechanism, of not using the things that I know are good for me, at the times I need them most... then you look back and you beat yourself up, you think I've done it again."*
>
> <div align="right">Participant 5</div>

For one participant, the feeling of being stuck seemed to completely disrupt their normal routine. Thus, becoming unstuck seemed to require finding a way out of these unhelpful patterns of thinking and behaving.;

> *"And that's all stopping me to do that. When I get up in the morning, I feel as if, what am I going to do now? Before I used to do it an- get up and do things."*
>
> <div align="right">Participant 1</div>

3.5.3.2. Subtheme: not spiralling out of control

The feeling of being bound by distress also manifested in a loss of control over thoughts or behaviour. This was described as a cumulative process of "spiralling" or a "whirlwind" (participant 5) of thoughts that seemed to occur without agency. For some, this led their minds to the worst possible scenario;

> *"spiral, erm, and catastrophise, and, erm. I describe it as sort of whirling round and round and round."*
>
> <div align="right">Participant 4</div>

> *"And we were thinking like, it would just spiral to the worst place, like oh they hate us, or I've done something wrong." (participant 6)*

One participant described how focusing on "small things" seemed to drive this process;

> *"I think you kind of, when- when you're spiraling down. you kind of focus on the small things that are…. that are starting to accumulate as a result of feeling low. (participant 4)*

In other cases, the uncontrollability of thoughts was described as branching off down multiple paths, so instead of ending up at "the worst possible scenario", multiple scenarios were generated. However, the inability to focus on one thing seemed to lead to a sense of uncontrollability;

> *"I just seem to see every situation. And run everything and, run scenarios, and, imagine what someone else is saying, or thinking, or- and then get myself really stressed. because I'm not really in control of anything. Or just that it seems to be getting away with me."*
>
> <div align="right">Participant 3</div>
>
> *"Just tangenting off in load of different directions, and, never actually focusing on one particular area… goes off like a tree."*
>
> <div align="right">Participant 5</div>

One participant described the speed at which their mind was processing information as a series of "steps", with faster processing seemingly linked to less controllability.;

> *"I seem to have gone into two steps higher, so everything's faster. So, I flip into panic. I flip into, wanting to run away…*
>
> *…I run over things so fast in my head, that everything seems to run faster."*
>
> <div align="right">Participant 3</div>

However, one participant described their mind *"drifting off into other things"* (participant 5), which implied a lack of awareness in the moment. The underlying commonality in these descriptions was an inability to control the thoughts or behaviours. This could last for extended periods of time, intensifying the experience of distress;

> *"When you realise you try'na let go, and they're not letting go of you. I think. And it- that stage where you feel like you don't have control of it anymore…*
>
> *… so not consciously, but I think it was, I say sliding."*
>
> <div align="right">Participant 5</div>

> *"sometimes like my thoughts get so carried away and… it goes on for days and I imagine the worst scenario and make myself ill."*

<div align="right">Participant 6</div>

Being able to stop thoughts spiralling out of control seemed to require the ability to "switch off" from these processes;

> *"Being able to switch off that part of me, who's beginning to get into the snowballing effect of panicking about everything." (participant 3)*

3.5.4. Theme: Taking back control

Following the group, participants described feeling *"more in control" (participant 3)*. This was not merely a passive sense of control over their experience and behaviour, but required effort and motivation. Conscious application of mindfulness strategies outside seemed to open up new possibilities that allowed participants to *"break out"* (participant 5) of habitual thinking or behaving, which offered a chance to do things differently. That is not to say that this was entirely conscious, as for some it happened *"without thinking"* (participant 7), and there seemed to be a duality in the experience of change as a stepped journey or a moment of recognition that things were different.

3.5.4.1. Subtheme: managing in the moment

Several participants spoke about using mindfulness as a "tool", which required an awareness of when, and remembering, to use the strategies. For example, one participant spoke of the importance of *"being able to remember…and actually being able to try and apply it"* (participant 3). This implies that change requires effort and a conscious decision to use strategies. As one participant noted;

> *"it's consciously going, right I'm going to use this 'cause I know it's- it'll be helpful and it should work. Which it does…*
>
> *… I've tried to keep it in the front of my mind, so that I don't forget about using it."*

<div align="right">Participant 5</div>

Using the tools provided by the intervention, allowed participants to manage difficult experiences in the moment. One participant spoke about using the practices when they became aware of their difficulty; "*I did the breathing exercises soon as I knew, that I'm going to have a panic thing. and I'm worrying about something.*" (participant 1)*.* Doing so seemed to foster the ability to "break" out of unhelpful thought processes or behaviours.

> "*…cutting off from things that I've been- that have been in my head, which makes it easier to stand up and literally move to… my kitchen or, you know, whatever else, cause' I'm a huge…procrastinator…Err yeah so it's a good way to break out of that.*"
>
> Participant 5

> "*So, I'm forgetting about what I was thinking before, for a few minutes. And even that, breaks that pattern for a while.*"
>
> Participant 7

For some, breaking out of usual thoughts or behaviours provided an opportunity to approach situations in a different way. One participant described this as a chance to "stop" and "restart". However, it was not just about breaking out of usual patterns, but also a shift towards approaching situations in a more "systematic" way. Taking an organised approach seemed difficult to do when locked in unhelpful thoughts or behavioural patterns.

> "*That's quite good, just to have something to give myself a stop and restart, and just, yeah, was a good organiser.*"
>
> Participant 5

> "*My depression means that I over-analyse absolutely everything. So, I think, that's made me… skip a couple of steps. So, for me to be grounded, I feel like I'm, more in control, more systematic.*"
>
> Participant 3

Having the tools to manage difficulties in the moment provided a sense of empowerment and independence. For some participants, becoming less reliant on others felt like a "step forward", suggesting that this may have been an intermediary goal. This provided practical benefits, but also seemed to promote a sense of wellbeing in itself. One participant felt that having the means to manage alone provided a longer-term solution to problems than individual therapy. Thus, perspectives or even practical support offered by others may have served to maintain difficulties over time;

"I always wanted someone's help and I had that. And I always had to be someone with me. And err… now I can sit in the chair or something and started doing in the room the breathing exercises. It feels really good. because you feel as if, you can do it yourself, you're independent and you're coming one step... forward...

…So, I know how to get better myself. Even if it's a few minutes, it's a world to me."

<div align="right">Participant 1</div>

"Erm, because it wasn't… talking over, and someone else trying to help you, take a different perspective on… whatever situation was going on. It was more giving you the tools to be able to do that yourself. So…it felt like more of a long-term fix than an eight-week, one-to-one counselling would be- being able to use those tools"

<div align="right">Participant 4</div>

3.5.4.2. Subtheme: new outlook/possibilities
The group also allowed participants to adopt a new outlook, both in their understanding of their difficulties and the way that they approached situations. For some, this came from "noticing" or "observing" what the problem was. For example, one participant spoke about a shift from understanding their feelings of low mood and depression as an individual problem to a recognition that they were *"furious"* about their circumstances. However, stepping away from previous ways of thinking and behaving was not necessarily easy;

"I am angry. No, anger- I feel angry. And trying to go, anger is here. That was a struggle with no-noticing that I was actually furious about what was happening, rather than…you know, putting the anger inward- inwards, which gets, which then, makes you feel worse."

<div align="right">Participant 4</div>

In contrast, another participant spoke about a shift away from blaming others;

"I did my breathing exercises, I didn't get angry. And I used to get angry, like, for anything, you know. And I used to blame someone and, so all that had made a little bit of difference."

<div align="right">Participant 1</div>

This shift in perspective seemed to allow participants to generate ideas about how they might approach their problems ways in a different way;

"I'm in the observant part of, yes I can see the situation I don't like. And if I can make myself go on a different route, just for a little bit longer, then I can kind of, turn the corner on it I think."

<div align="right">Participant 3</div>

"…going, actually… I'm feeling low because of this situation, and actually I'm feeling low because, I'm, not confronting this situation, and I am actually very angry about this situation."

<div align="right">Participant 4</div>

A new outlook was sometimes described as a shift in what participants were paying attention to. Several participants spoke about bringing themselves back into the present moment, which allowed them to focus on what they were doing and thus opened the door for behavioural change;

"Which is great and, it's fascinating, but it can literally just take up, hours and hours, so- so it's something about bringing yourself back to what you wer- maybe a few dishes, or something like that."

<div align="right">Participant 5</div>

> *"I used to wander around and I didn't know I was, and I was walking…And when I walk on the road (now), I'm always trying to look where my footsteps are going and concentrate on the present."*
>
> <div align="right">Participant 1</div>

Other participants spoke about a shift from focusing on their inner thoughts and feelings (internal self-focus) to what was going on in their environment (external focus). This fostered a sense of grounding, allowing them to maintain contact with "reality" (participant 6), instead of getting lost in their internal worlds;

> *"Err, like, when I've been in social situations, when I felt very anxious, I've just tried to be more mindful of my surroundings, and focus less on myself, and like how I feel and how I think people are seeing me."*
>
> <div align="right">Participant 6</div>

Participants also described behavioural changes as a result of being open to new possibilities, whether this was a shift in the understanding of their difficulties or their attentional focus. For some participants, this meant that they were able to approach situations that they had previously avoided or been unable to engage in.

> *"I think I'm doing it, like, I'm not leaving things, I'm doing thing when I need to do them."*
>
> <div align="right">Participant 6</div>

> *"And then this morning spent looking at application forms and actually trying to make myself- trying to do that kind of thing. Which, I couldn't imagine doing the last three weeks, and I... wasn't doing when I was well, before."*
>
> <div align="right">Participant 3</div>

> *"Like my husband said, he dropped me- he says. I'll be here at five o'clock. I says no no let me try to come by myself, which I would never say that before."*
>
> <div align="right">Participant 1</div>

However, it was not just a move towards doing things that participants noticed, but also a shift in *how* they were doing things. Participants seemed to be experiencing and appreciating what they were doing in a different way, which led to more moment-by-moment pleasure.

> *"…I just kind of made sure I kind of enjoyed the walk on the way there type thing. It's a rarity and actually it's quite nice, to have space and breathe, and take in things rather than… yeah.. run."*
>
> Participant 3

> *"I have been doing, I going to a couple of people, and, when I went for a walk, and I thought, I'll smile at this person. It makes you feel better, you say good morning to someone."*
>
> Participant 1

Behavioural changes seemed to have a freeing effect on some participants, inviting new possibilities of how they could be in the world. For example, being free from fear led one participant to feel as though they could "do things";

> *"Even when I used to go out, I always had to have someone with me... and when I'm walking on the road, I'm looking at everyone and being scared. But now I feel as if.. you know. I can do things."*
>
> Participant 1

A notable similarity was that these behavioural changes were not necessarily groundbreaking or a marked shift away from usual activities, but were different enough to impact on the individual's sense of wellbeing. Even in the absence of an observable behavioural change, attending the group, and the knowledge that they were "trying" seemed to foster a sense of motivation and a desire to progress and for things to be different;

> *"I think when I'm doing it I know that I'm trying. And I want to try. And that's what I'm learning. It's helped me like that…*

...That makes you feel better. It feels as if I can do it. you know, trying. And I will do it, and then, I can be normal, you know? So I got that confidence, to… progress myself."

<div align="right">Participant 1</div>

"So actually, making myself persevere with the course meant part of me was still wanting to do something."

<div align="right">Participant 3</div>

Thus, a new outlook brought a sense of hope that things *could* be different, even if this was not the case at the time. This seemed to be a particularly important step for those who had been stuck in unhelpful patterns of thinking and behaving for many years. By becoming more detached from their experiences, participants were able to put their problems into perspective, allowing them to locate their experience within time and context;

"It gives you detachment, and, more objectivity, about… whatever going on. And thinking, this is- this is happening now, but it's not gonna be like this forever."

<div align="right">Participant 4</div>

3.5.4.3. Subtheme: change as a journey
The process of change could be described as embarking on a personal journey. There appeared to be a duality in the way change was noticed and experienced by participants; being described as a gradual and progressive or as an instance or moment. The overall "journey" of change seemed to have two key qualities; a sense of "direction" and a sense of being incremental;

"It's like a tool to keep… to keep you heading the right way and not being too taken off one way or another or sliding down too much."

<div align="right">Participant 5</div>

"It feels really good. because you feel as if, you can do it yourself, you're independent and you're coming one step... forward. You know?"

<div align="right">Participant 1</div>

Some participants were able to situate their current progress in relation to their hoped-for outcome; *"yeah I'm about halfway"* (participant 7); *"It brings me a bit further along the journey"* (participant 3).

In some instances, the journey was described as steady and deliberate as a result of practice;

> *"Erm, gradually, I'm finding, that I'm not drifting off quite as much. which I think again is a practice. you know the more you practice."*
>
> Participant 5

However, change was considered as being instantaneous, or occurring within a specific moment;

> *"I don't know how to explain it, yeah it just kind of clicked for me."*
>
> Participant 7

> *"And if I can make myself go on a different route, just for a little bit longer, then I can kind of, turn the corner on it I think"*
>
> Participant 3

For some it was the recognition of a change in cognition or behaviour that appeared to occur in a specific instance;

> *"I think like in the middle (of the group)."*
>
> Participant 1

> *"I think at the time… there was like one session that erm, I remember clearly."*
>
> Participant 7

Thus, whilst change might be broadly conceptualised as progression towards valued outcomes, for some, this seemed to be punctuated by key moments of difference.

What became apparent was the individuality of change. Participants embarked on their journeys together, perhaps with similar destinations in mind; to overcome their difficulties and feel better. However, the directions and durations taken to reach these destinations varied. For some, the course was turbulent, marked by set-backs and restarts, whilst for others the search for the right route led them down several paths before eventually heading in the right direction. A key aspect of this journey seemed to be to find the road untraveled, a route that had not been taken before, or at least one that had not been persisted down, perhaps out of fear of what lay ahead. As such, the group, and mindfulness, was a vehicle for change.

3.5.5. Theme: Group Experience

Group experience was described in a number of ways and encompassed specific valued aspects of the therapy, such as the content, organisation and format of delivery, as well as the phenomenon of being with others within a group setting, which was a big "step" for some participants. However, the group experience could not be separated from life outside of the group, as events and responses within one domain had roots in, and transformed, the other. Moreover, the commitment and routine of attending the group seemed to be particularly useful in getting through difficult times.

3.5.5.1. Subtheme: valued aspects
Several participants commented on the mindfulness practices included in the group. Some felt that shorter practices were more beneficial than longer meditation practices because they were easier to apply practically in everyday life and were more manageable than extended sitting practices;

> *"I was doing quite- there's a ten-minute…twenty-minute meditation was just a bit to long for me to try and figure out."*
>
> Participant 3

"sometimes at home we can't just sit down for twenty minutes"; "I found those easier to concentrate, 'cause they were shorter. Like the short exercises, I did enjoy it."

<div align="right">Participant 6</div>

Behavioural strategies such as building a routine around longer practices, and having resources to hand, made home practices easier to engage in and highlights a way in which participants could be supported to do this.

"…actually, bringing it into more of a routine, was actually quite good... …I still have the CDs next to my CD player…I've got them saved on the computer, and things like that, so, having them around and being able to access them"

<div align="right">Participant 3</div>

There were, however, differing opinions about the variety of practices included in the course;

"…because there have so many different variations (of the practices)*, you could kind of see where some slotted into it better than others."*

<div align="right">Participant 3</div>

"Maybe there could have been more variety, like the body scan and other meditations, they were quite similar."

<div align="right">Participant 6</div>

The commonality was that participants valued practices that could be applied or "slotted in" into everyday situations as opposed to formal sitting practices. For some this reflected a difficulty taking time to engage in practices, whilst others wanted to use practices to cope in challenging situations;

"…while we're doing things, different activities in the day, how we can incorporate mindfulness into them… or things we can do like, in public say, I get very nervous walking down the street, or waiting at a bus stop..."

<div align="right">Participant 6</div>

Guidance for practices and cultivating an understanding of mindfulness were also valued aspects of the group experience. This was referred to in terms of the resources provided, which facilitated the application of learnt strategies outside of the group and provided continuity when sessions were missed;

> *"the CDs were quite good, to show you what actual pr- what practices were, and the proper length of the practices, and the proper instructions."*
>
> Participant 4

> *"…it didn't feel like you were missing that much when you missed a session yourself… coz (the teacher) went over stuff quite a lot and the handouts were really good as well."*
>
> Participant 3

However, there seemed to be an added value of the having the facilitator talk through the practices that nurtured a richer appreciation of the content. The group environment seemed to create a whole experience that extended beyond individual elements, such that the whole was greater than the sum of its parts. This seemed to foster a better understanding and commitment to engage in the therapy.

> *"And the way (the teacher) explained them as well, they were more- you could kind of see like a bit more, flesh to them."*
>
> Participant 3

> *"just the fact it was there, with the trainer doing it, rather than hearing it on a tape or, seeing it on a video."*
>
> Participant 5

3.5.5.2. Subtheme: being with others
The group experience was also grounded in the experience of being with others. Several participants expressed an initial hesitation, or fear about being

in a group setting. For one participant, being able to attend felt like an achievement in itself;

> *"And I was bit always scared to.. be with people…so my biggest thing was, the first step to come here and sit with a group of people."*
>
> Participant 1

In particular, participants seemed to worry about themselves in relation to other group members. This appeared to be driven by the belief that they were different, and would therefore be judged or evaluated negatively by others;

> *"I thought- when I first came, I thought, I'll be the only one, who's got all these thing in mind. and they're all gonna think, you know, she's funny."*
>
> Participant 1

> *"I didn't want to like go blalalalalalalah when other people- I didn't want to dominate the group by, jumping in there"*
>
> Participant 4

However, over time participants seemed to feel more comfortable; "…everyone starte- started to…relax a bit, err, with each other." (participant 4). This shift seemed to be facilitated by the relatively small group size and individual qualities of the group facilitator;

> *"I enjoyed that it was a small group, 'cause I get quite nervous in large groups….erm, so that was good."*
>
> Participant 6

> *"when have someone like her (the teacher), you feel comfortable otherwise I was thinking that… I was going to walk out"*
>
> Participant 1

Once initial worries were overcome, hearing the experiences shared by other group members tended to have a positive impact. This was largely due to the

normalising effect of hearing the similar experiences of others, which helped participants feel less alone;

> *"But, when I found out, I says, there's a lot of people like me, are in the same boat. So that made me feel, like, more confidence as well. It's just not me..."*
>
> <div align="right">Participant 1</div>

> *"'cause I find it difficult to be in normal social situations. But in that group, that we were going through similar things, and that made it easier, and it was nice to be around people like that."*
>
> <div align="right">Participant 7</div>

Shared experiences also allowed participants to empathise with each other, which came from a place of knowing what it was like. This potentially marked a shift in from the role of being helped or cared for to being able to help and care for others;

> *"I felt sorry for everyone, and what they're going through. Because I know I'm going through, it's really difficult, you know…*
> *….You still want to help other people and you're going through that"*
>
> <div align="right">Participant 1</div>

With the focus being on the practices and discussions about practices, there was less pressure on social interactions within the group, which provided experience of a less threatening social situation. For some participants, the confidence gained from being with others in the group transferred to social situations outside of the group;

> *"So, like when I walk on the road, I feel as if, like, oh this one is perfect. But they might be same… like me. So, makes me feel as if more confidence. That they're not looking at me funny."*
>
> <div align="right">Participant 1</div>

The group also facilitated mutual learning through explicit sharing of ideas and observation of how others coped (informative function). One participant in particular felt that this could have been a more focal point of the group;

> *"And then to hear that other people were, yes, they were having a hard time trying to focus as well, but then they were focusing on this, or how they did washing up mindfully, or how they used to stroke their cat mindfully"*
>
> Participant 3

> *"And she's cried, and she felt better. Afterwards I could see, that she felt better. She had someone to talk to, and, she poured it out and got it out of her chest."*
>
> Participant 1

> *"…shared some experience or learn from another person, how they dealt, or how they deal with it…I would like that."*
>
> Participant 1

3.5.5.3. Subtheme: life outside the group

Some participants reported experiencing difficult life events over the course of the group which made attending more difficult and hindered engagement in mindfulness practice;

> *"Well, it's come as, at a very, erm, eh, disruptive, stressful time in my life. So I think the changes will be more… long term really."*
>
> Participant 4

> *"I'm struggling with my family at the moment…and then my dad died about two years ago, and then the anniversary was around the time I had a meltdown…The current situation at my job, is that for the last six months I've been bullied."*
>
> Participant 3

In some cases, mindfulness practices seemed to make these situations more difficult to manage;

"It gets to a point where the mindfulness doesn't work. Because… sitting quietly, allows all the crap to come back into your head."

<div align="right">Participant 5</div>

"…literally doing anything that grounded me was painful…because I had so many other things going off at the same time

… actually having to pay attention to myself. It was as painful as being, that I wasn't trusting my own thoughts or how I was dealing with things."

<div align="right">Participant 3</div>

However, the routine and commitment of coming to the group seemed helpful in getting through difficult times by providing *"structure to a pretty unstructured life"* (participant 5). For one participant, leaving her house was considered beneficial in itself, whilst attending was seen as an act of self-care and indication that she had not completely lost grip;

"So making myself go, NO, you've committed to this, this is what you're going to do..."

<div align="right">Participant 4</div>

"…and actually, gave me time to be me, and wanting to learn something else. It helped me- want to make me make connections and do the actual work…

…And within twenty-four hours- within the whole day, actually coming in…was the first time I've been out the house…

... making myself persevere with the course meant part of me was still wanting to do something… making sure I wasn't losing grip completely."

<div align="right">Participant 3</div>

4.0. DISCUSSION

4.1. Chapter Overview

This chapter discusses the results of the study in relation to the initial research questions and the current evidence base. The potential implications for individuals, services as well as the wider theoretical and clinical inferences of the findings will be considered and recommendations for future research made.

4.2. Summary of Quantitative Findings

4.2.1. Sample and Group Attendance

The six participants who attended the group were of different ages and came from diverse ethnic backgrounds, which reflected the local demographic of the area. Only women attended the group, although two men were initially recruited to take part. The implication of this will be discussed later in the chapter. Five participants (participant 1, 2, 3, 4 and 6) had a diagnosis of anxiety and depression, of these, one participant had an additional diagnosis of bipolar disorder (participant 3), whilst one participant (participant 5) had a diagnosis of depression alone. All participants reported experiencing more psychological difficulties than they were formally diagnosed with (see Table 2). Furthermore, half of the participants identified as having struggled with these difficulties for over 20 years, which highlights the complexity and chronicity of the clinical presentations within the sample.

Group-therapy literature suggests that some participants will fail to commence and some will fail to complete group interventions (Swift & Greenberg, 2012). However, within the present study all of those who started the group completed the intervention attending, on average, 5.3 sessions and all participants rated the group as useful in moving closer to valued-outcomes. This speaks to the acceptability of the group-based MBCT within this population, and is in line with research that demonstrates the acceptability of MBIs (Khoury et al., 2013).

4.2.2. Does MBCT Reduce Scores on Symptom-Based Outcome Measures?

4.2.2.1. Generalised anxiety

All participants identified as having generalised anxiety disorder (GAD). Two participants reported reductions from severe to mild levels of GAD between baseline and follow-up (participant 4 and 6), although the rate of change varied for these participants. One participant (participant 3) demonstrated a slight reduction in scores between baseline and follow-up, despite an increase in scores during the group, but remained in the moderate severity range. Two participants reported no changes at follow-up, with one remaining in the healthy range throughout the group (participant 5) and one remaining in the severe range (participant 1).

4.2.2.2. Depression

Only one (participant 4) of the five participants reporting depression demonstrated a notable reduction in depressive symptomology over the course of the group from severe to moderate levels. One participant (participant 5) demonstrated slight reduction in depressive symptomology from moderate to mild levels, although this only denoted a 3-point change in scores from baseline to follow-up. Two participants showed no change in depressive symptomology, scoring in the severe range at baseline and follow-up (participant 1 and 2). One participant (participant 3) reported a slight increase in depressive symptomology at week 8 and follow-up.

4.2.2.3. Panic

Three participants reported symptoms of panic (participant 2, 3 and 4). Only one participant demonstrated a reduction in symptoms of panic from mild to normal levels between baseline and follow-up (participant 4). The other two participants showed increased levels of panic from borderline to moderate (participant 3) and from moderate to severe (participant 2) over the same period.

4.2.2.4. PTSD

Of the three participants reporting symptoms of PTSD (participant 1, 2 and 6), one participant reported a reduction in symptoms (participant 6), whist the other

two participants reported a slight increase at the end of the group, which increased further at follow-up (participant 1 and 2).

4.2.2.5. Other symptom-based measures
One participant (participant 2) reported symptoms of obsessive-compulsive disorder, which did not change notably over the course of the intervention or at follow-up. The same participant also reported symptoms of specific phobia and hallucinations, which increased notably over the course of the group. One participant (participant 6) reported symptoms of agoraphobia, which did not seem to change over the course of the group.

4.2.2.6. Summary of symptom-based outcomes
Overall, there was limited evidence to suggest that group MBCT reduced scores on symptom-based measures. With the exception of participant 4, changes on these measures tended to be minimal and in some cases increased symptomology was noted (e.g. participant 2). Furthermore, profiles of symptom change were different for each participant. For example, participant 3 showed an increase in symptomology in the middle of the group, which tended to reduce to baseline levels at follow-up. In contrast, participant 4 tended to show a steady decrease on symptom-based measures, whilst participant 2 showed little to no change on scores of anxiety and depression and obsessive-compulsive disorder (OCD), but demonstrated increased symptoms of panic, specific phobia and the number, frequency, distress and distraction associated with hallucinations.

The present findings do not support previous research which has demonstrated the effectiveness of MBIs in reducing diagnosis-specific symptoms (Goldberg et a., 2018), including symptoms of depression (Eisendrath et al., 2008; Geschwind et al. 2012; Kenny and Williams, 2007; Strauss et al., 2014), generalised anxiety disorder, panic disorder and OCD (Madani et al., 2013; Samina et al., 2015) and in helping participants accept and disengage from symptoms of psychosis (Chadwick et al., 2009; Khoury et al., 2013). However, these findings can be considered in light of the fact that the main target of MBIs is not symptom reduction, but to change one's relationship to symptoms. In this case, participants who were previously avoidant of symptoms, may experience

no change or even increased symptomology as they become more aware of, and relate to their symptoms differently (Kyuken et al., 2010). Furthermore, whilst symptoms did not seem to be linked to satisfaction with living circumstances or the amount or type of support received from others, it is possible that other events outside of the group may have influenced scores on these measures.

Interestingly, reductions on symptom-based measures did not seem to be related to ratings of closeness to valued-outcomes, nor how useful the group was in achieving these. This implies that symptom reduction may not be reflective of meaningful change. These findings support the criticisms of the current nosological approach to mental health problems, which considers symptom reduction as the main target of psychological therapies (e.g. Freedman et al., 2013; Kessler et al., 2005; Kirk & Kutchins, 1992; Mirowsky & Ross, 2003; Narrow & Khul, 2011).

4.2.3. Does MBCT Reduce Scores on the Cognitive Behavioural Processes Questionnaire?

Five of the six participants (participant 2, 3, 4, 5 and 6) reported reduced scores on the CBP-Q between baseline and follow-up, indicating less engagement in the transdiagnostic cognitive and behavioural processes that Harvey and colleagues (2004) identified as being associated with psychological distress. Three participants (participant 4, 5 and 6) demonstrated a steady decrease in scores over the course of the group. Conversely, two participants (participant 2 and 3) showed an initial increase in scores over the eight weeks, which reduced below baseline levels at follow-up, suggesting that change may have happened later for these participants or that there may have been other factors influencing scores.

The current findings support the trandiagnostic approach as changes on the CBP-Q were observed across participants with varying diagnoses and psychological difficulties. They also support previous empirical research demonstrating that group MBCT reduces engagement in negative repetitive thinking (Ietsugu et al., 2015; Kingston et al., 2007; Radford et al., 2012), metacognitive beliefs (Capobianco et al., 2018), thought suppression (Crane et

al., 2009) and overgeneral memory (Williams et al., 2000). However, the current research builds upon the previous evidence base in two ways. Firstly, the participants within the present study identified as having a range of psychological difficulties, and all identified as struggling with at least two psychological problems, whereas previous research has been limited to people with a diagnosis of depression and/or anxiety. Secondly, the findings imply that that group MBCT may reduce engagement in transdiagnostic attentional, memory, reasoning thought and behavioural processes that have not previously been studied within UK-based clinical populations.

The findings are also in line with research demonstrating that engagement in transdiagnostic processes is positively correlated with distress and negatively correlated with mindfulness meditation in meditators in non-meditators (Baer et al., 2006; Lynkins & Baer, 2009) and mindfulness attention and awareness in clinical and non-clinical populations (Solem et al., 2017; Ubeda-Gomez et al. 2015).

4.2.4. Does MBCT Reduce Scores on the Acceptance and Action Questionnaire?

Only one participant reported notably lower scores on the AAQ-II between baseline and follow-up, suggesting decreased experiential avoidance and increased psychological flexibility. Three participants showed minimal changes within this time period (less than 5-point reduction), whilst two participants showed no change in scores at the start and end of the group. Thus, although there was some indication that group MBCT might reduce scores on the AAQ-II, this was not found consistently nor substantively enough, in comparison to changes on other measures, to draw a firm conclusion. These findings provide some support for the theoretical links that have been drawn between mindfulness meditation and experiential avoidance (Williams et al., 2007) and previous research that has found that MBSR reduces levels of experiential avoidance (Greeson et al., 2010). However, it is important to note that the AAQ-II is a measure of psychological inflexibility, a construct that includes but is not limited to experiential avoidance, and thus the modest changes in scores on this measure may indicate that group MBCT does not necessarily target this construct. Thus, whilst people were becoming somewhat more psychologically

flexible, and less experientially avoidant, this did not seem to be the most important change demonstrated by participants in the group.

4.2.5. Does MBCT Increase Scores on the Five Factor Mindfulness Questionnaire?

Three participants reported noteworthy increases in scores on the FFMQ between baseline and week 8 (participant 3, 4, and 6), with further increases observed at follow-up, whilst one participant (participant 5) showed a one point increase at the end of the group. Two participants showed a slight decrease in scores at week 8 (participant 1 and 2), although participant 2 subsequently demonstrated an 8-point increase at follow-up, suggesting that, for this participant, an increased in flexible awareness may have occurred at a later stage. Overall, scores on the FFMQ did show an increasing trend over the course of the intervention, although not reliably, suggesting that group MBCT somewhat increased participants' flexible awareness. However, given that MBCT supposedly targets this process, it is surprising that increases were not found more consistently. Furthermore, the increases seen at follow-up may suggest that increases in flexible awareness occur over time, perhaps as participants begin to apply strategies outside of the group or with increasing practice (Kabat-Zinn, 2005). It is possible that had further follow-up measures been collected, the observed increasing trend may have continued.

4.2.6. Does MBCT Increase Scores on the Reorganisation of Conflict Scale?

Four of the six participants (participant 1, 4, 5 and 6) reported increases on the RoC over the course of the group and at the end of the intervention, with one further participant (participant 3) demonstrating increases at follow-up. Three participants (participant 1, 4 and 6), showed particularly large gains of 20-points or more. Increases tended to occur at a steady rate over the course of the group, although two participants (participant 1 and 5) showed particularly large gains over the first few weeks, which is in line with PCT theory (Mansell et al., 2013). This implies that group MBCT led to increased reorganisation of higher or lower order goals for these participants over the course of the group. This supports previous literature, which suggests that MBIs can impact on the process of control (Watkins, 2008), perhaps by allowing participants to switch

awareness between abstract and concrete levels of goals, which may facilitate reorganisation.

4.2.7. Do Participants Move Closer to Valued Outcome Goals Following Group MBCT?

Five of the six participants (participants 1, 3, 4, 5 and 6) reported increased closeness to valued-outcomes over the course of the group, whilst one participant (participant 2) reported a 1-point decrease. This suggests that participants did move closer to valued-outcomes following group MBCT. Although the increases noted were often not substantial, given the complexity and chronicity of the population, it is possible that these small increases reflected important changes for participants. Furthermore, all participants rated the group as being useful in moving towards these valued outcomes. Participant 2, who demonstrated a slight decrease in closeness to valued-outcomes also provided lower ratings of how useful the group was, which suggests that she did not find the group as beneficial. Interestingly, this participant also reported the greatest number of psychological difficulties, which may suggest that her difficulties were more complex than others. However, as she did not agree to take part in the qualitative interviews, it was not possible to explore this further.

4.2.8. Trends Across Measures

Overall, changes observed as the result of the group were most prominently and consistently found on the CBP-Q and the RoC, suggesting that participants were engaging less in cognitive and behavioural processes associated with distress, and that reorganisation of goal conflict occurred over the course of the group. Perhaps a more interesting finding was the inverse relationship between scores on these measures. The relationship between the CBP-Q and the RoC also seem to support the idea that reorganisation of conflict, as opposed to increased flexible awareness or psychological inflexibility, may account for the decrease in scores seen on the CBP-Q, and thus control might be the core process identified in factor analysis studies (e.g. Field & Cartwright-Hatton, 2008; Mansell & McEvoy, 2017; Patel et al., 2015). However, this is a tentative interpretation based on visual observation of findings as no statistical analyses

were carried out and it was not possible to establish causal relationships. However, these preliminary finding seem to concur with previous claims made by Mansell and colleagues (2013), that attempts to control experience through engagement in transdiagnostic processes can, without awareness, create conflict with other important goals. Conceptually, if people are engaging in transdiagnostic processes to try and reach their goals, it would make sense that as goals are reorganised, the way in which they attempt to achieve these would also change, resulting in reduced engagement in transdiangnostic processes. Although there seemed to be a relationship between scores on the CBP-Q and the FFMQ and between scores on the RoC and the FFMQ, these relationships were not as clear nor as consistent. However, increasing flexible awareness might be an important part of the process of reorganisation (e.g. Watkins, 2008), and might explain how group MBCT led to the changes seen on the RoC. Thus, an intervention aimed at targeting control may have led to greater changes on process-based measures.

Interestingly, changes on process-based measures seemed to occur even in the absence of changes on symptom-based measures. One interpretation of these findings is that engagement in transdiagnostic processes may not always be related to the number or level of symptoms experienced. These findings concur with previous research into group MBCT that found a reduction in overgeneral memory in the absence of change in depressive symptomology (Crane et al., 2012; Williams et al., 2000). Furthermore, most participants reported increasing closeness to valued-outcomes over the course of the group. This indicates that symptom-reduction is not necessarily a prerequisite for attaining valued-outcomes and that reduced engagement in transdiagnostic processes may be more important attaining these. This calls into question the usefulness of symptom-based outcomes, which are rooted in nosological diagnostic systems (Timimi, 2014) and upon which service delivery and evidence-based research are arguably still heavily reliant (e.g. Oliveria-Maia, Mendonca, Pessoa, Camacho & Gago, 2016; Schrank & Slade, 2007).

Importantly, symptom and process-based outcomes used in the current study may not be entirely reflective of the constructs that they propose to capture. Critical realist epistemology postulates that our knowledge can only be

estimated through proximal measurement of experiences, which are undoubtedly influenced and limited by our current understanding of the constructs. Therefore, as our understanding of these underlying constructs evolves, so too will the measures used to capture them. For example, the RoC is a relatively new scale that is currently being refined and psychometric testing of a newer version of the scale is currently underway. Whilst this is an important consideration, it does not stop pragmatic conclusions being drawn based on the current findings.

4.3. Summary of Qualitative Findings

4.3.1. How do participants describe their experience of change?

In describing their experience of change within the group, participants seemed to first reflect on their experiences prior to commencing the group. This not only provided insight into what changes were seen as a priority, but also seemed to be an important aspect of the change experience. It is possible that for some participants, these pre-change experiences may have provided the impetus to seek psychological help, perhaps marking the point at which they felt change was necessary. Furthermore, being able to describe and reflect on these experiences suggested degree of detachment, which in itself seemed to signify a degree of change.

Participants described being bound by their distress; feeling stuck in unhelpful thought patterns or behaviours or spiralling out of control. Thus, it seemed as though change would necessitate breaking free from the binds that they had previously found themselves in. Participants spoke about being stuck as being pushed downwards or going backwards. This seemed to imply that distress as well as change, is a non-linear process, which is in line with research in to recovery (e.g. Turner and Frak, 2001). This is a particularly important finding if one considers that mental health services and research currently ascribe value to a linear model of recovery and change. For example, studies into the effectiveness of MBIs have often used outcomes such as depressive relapse to indicate the effectiveness of therapy (e.g. Kuyken et al., 2016), which

disregards the possibility that the process of change might inherently involve movements in different directions.

Participants descriptions of being stuck in unhelpful patterns of thoughts or behaviours also seem to reflect arguments that it is the way that people engage in cognitions or behaviour, rather than the content of thoughts that cause distress (Harvey et al., 2004; Mansell et al., 2008). Thus, regardless of participants' specific goals, it was the way in which they were trying to achieve these that was causing difficulty, which supports Klinger's (1996) "current concerns" theory and PCT (Powers, 1973; Mansell, 2005). Engaging in unhelpful thoughts or behaviours seemed to preclude other meaningful activity, which relates to the concept of goal conflict (Mansell, 2005). Thus, becoming unstuck from these unhelpful processes seemed to be an important aspect of change.

Similarly, participants described feeling as though their thoughts were spiralling out of control, which seemed to map onto the transdiagnostic process of repetitive negative thinking (Harvey et al., 2004). Interestingly, there did appear to be some distinction between ruminative styles of thinking, which seemed to have a looping quality and worry-based thinking in which multiple possible scenarios were generated. However, it was the overarching uncontrollability of the thoughts that seemed to cause distress. This again seems to relate to PCT literature and the loss of control that might result from sustained goal conflict (e.g. Mansell, 2005; Mansell et al., 2013).

Thus, participants described change in terms of taking back control. The idea of taking back control has been referred to extensively in literature pertaining to recovery within mental health settings (e.g. MacKay, 2005; Repper & Perkis, 2003) and is in line with PCT. For participants within the current research taking back control seemed to encompass three concepts; managing in the moment, adopting a new outlook or seeing new possibilities, and experiencing change as a journey.

Being able to apply mindfulness strategies in the moment helped participants gain a sense of independence, which seemed to have important implications for

those who had previously been reliant on others. The concept of independence has been debated within literature as for some the expectation to become independent can seem imposed by services and society (e.g. Slade, Amering & Farkas, 2014). However, if one considers that change is a non-linear process, it is possible to imagine a journey of change that involves independence but also the opportunity to hand back responsibility to services or loved ones when necessary (e.g. Lester, Tritter & Sorohan, 2005). Furthermore, for some, change also involved a sense of interdependence- the chance to care about others- which was facilitated by being with others who were experiencing difficulties. The use of mindfulness as a "tool" as opposed to a lifestyle have been criticised by some researchers (Kabat-Zinn, 2005). However, managing specific difficulties in the moment seemed to be an important function of MBCT within this study, and may reflect the different considerations needed when applying MBCT within clinical populations.

Participants also described change as a new outlook. According to Langer (1989, p.7), a mindful state can enhance receptiveness, and when this open-minded state is applied to our own behaviour, change becomes more possible. For some this involved seeing their difficulties in a new light. Reframing difficulties provided the opportunity for participants to see new ways to approach their problems differently. What participants seemed to be describing was a shift in awareness. Several contextual CBT therapies, including PCT and mindfulness, allude to the importance of awareness as part of the change process. In PCT shifting awareness to focus on the perceptions that matter to them is a key aspect of reorganisation of goal conflict (Mansell et al., 2011). Participants' shifts in their understanding of their difficulties might be considered as a reorganisation of higher-order goals, that brought about change in lower-order goals and behaviours. In other words, a shift in how participants perceived their problems, seemed to facilitate a shift in their understanding of how to solve these problems, thus allowing them to break free from old strategies that kept them bound by their distress.

For others, a shift in awareness was described in terms of attentional focus, either towards the present moment, or from an internal to an external focus. This seems to support the idea that mindfulness facilitates a shift in awareness

from a "doing" to a "being" mode (Crane, 2009) but also speaks to the transdiagnostic literature regarding attentional processes. A shift away from engagement in internal cognitive and behavioural transdiagnostic processes, seemed to facilitate engagement in valued activities. This supports the idea that reduced engagement in transdiagnostic processes reduces psychological distress either through reducing experiential avoidance (Hayes et al., 1996) or through reducing conflict with other valued activities (Mansell et al., 2013).

A new outlook seemed to open the door for behavioural change. For some this reflected engagement in previously avoided activities, which supports the idea that behavioural avoidance may maintain distress (e.g. Harvey et al., 2004). However, a more interesting finding was that behavioural change was not necessarily described as undertaking remarkably different or several new activities, but was more about changing the way in which participants were engaging in activities that seemed to enhance wellbeing. Furthermore, in the absence of other behavioural changes, attending the group still promoted wellbeing through fostering a sense of motivation and hope that things could be different. This is an important finding considering that perceptions of recovery often imply a return to "normal" activities (e.g. Gould, DeSouza & Reberio-Gruhl, 2005) and is in line with literature that suggests that increased hope and optimism for the future is an important part of meaningful change (e.g. Bracken & Thomas, 2004; Turner & Frak, 2001).

Participants' descriptions suggested that change was an individual journey, despite some overlap in the routes taken or their final destinations. The individuality of change has been highlighted extensively in previous literature (e.g. Holttum, 2012; Turner & Frak, 2001). For some, the process may be slow and effortful with several set-backs, whilst for others change may happen in leaps or momentary instances. This is important when considering how services measure and define change. Whilst the recovery movement has brought about a number of important developments in the way that change is perceived within services (Jacobson, 2015), it is arguable that perceptions of recovery are still dominated by a linear, paternalistic narratives of symptom-reduction and "cure".

4.3.2. What aspects do participants find helpful or unhelpful?

In describing helpful and unhelpful aspects of the group, participants commented on the content and delivery of the group as well as the experience of being with others. They also discussed life events outside of the group that seemed to impact on the group experience.

There seemed to be some consensus that shorter practices were more useful than longer meditation practices. For some, longer meditations were experienced as unmanageable. This is in line with research into the application of mindfulness for people with a diagnosis of psychosis, for whom 10-minute practices are the limit (Chadwick, 2014). Only one participant within the current study identified as experiencing symptoms of psychosis, however the current findings indicate that this principle should also be adopted for those who are experiencing multiple psychological difficulties. This is an important consideration for implementation of group MBCT as, although adaptations were made in line with Chadwick and colleagues (2005) protocol, further reductions of practice length may be necessary within this population. Previous research into group MBCT has tended to include only those with single diagnosis or a diagnosis of anxiety and depression, and thus lacks ecological validity for many secondary care services and within the current service.

A second reason for preference of shorter practices was the ease at which they could be incorporated into everyday life. Although practice is an essential part of MBCT, it has been noted that the duration of practices can be off putting (Groves, 2016). Being able to utilise strategies in difficult situations was particularly important within this group, and was also reflected in participants' perceptions of the variety of practices included. Some participants felt that there was a sufficient variety, citing this a helpful aspect of the group, others would have preferred a wider variety, including practices that were more directly applicable to difficult situations. This is in line with previous literature that has cited the importance of having a toolkit to cope with difficulties within clinical populations (Groves, 2016).

Another aspect of the group that participants found helpful was the guidance provided both in the form of handouts and audio recordings, and by the group

facilitator. In particular, the guidance from the teacher seemed to enhance the experience of the group by providing a richer understanding of the practices. In MBCT, the role of the facilitator is to explore participants' present moment experience, thus fostering an openness to experience, and to create a space for relational learning by being present with participants, adopting a non-judgemental approach and creating a sense of mutuality (Crane, 2009). Indeed, within the current research, the facilitator brought additional benefits to the group experience that could not be attained solely through audio recordings or handouts.

The experience of being with others within the group was initially a daunting prospect, thus participants found the small group size helpful. It is possible that within this group, the recommended group size of twelve participants (Williams et al., 2012) may have made it more difficult for participants to feel comfortable. This discomfort seemed to stem from participants' negative evaluations of themselves and the fear of being judged by others. However, once participants felt more comfortable, being with others was a helpful experience. The benefits described seem to be in line with group processes described by Yalom (1995), including; normalisation and recognition of the universality of shared problems, sharing information of how to implement mindfulness strategies in everyday life and observation of others' coping mechanisms. It also offered a chance for group members to show altruism for others, which was particularly empowering for those who were used to receiving care and support.

Participants who encountered stressful life events during the group, valued the structure and routine of attending sessions. For some this reflected an act of self-care, and signified that they had not completely lost control. However, within moments of crisis or stressful events, some participants found it too difficult to complete practices. This contradicts previous literature, which proposes that mindfulness can be helpful during moments of crisis (e.g. Bearance, 2018). For these participants, maintaining awareness of present moment experience was too distressing, although they continued to attend the group. It is possible that this may reflect participants' difficulty in being accepting and non-judgemental of experience during these times, or that they may not have engaged in enough mindfulness practice to be able to transfer

these skills to more stressful situations. Furthermore, it has been suggested that exercises such as mindful movement, as opposed to sitting practices, may be more helpful during these times (Hickman, 2017).

4.4. Implications

4.4.1. Individual Level

The findings of the present study suggest that group MBCT may be an acceptable and useful intervention for those within a PCMHS, who experience multiple psychological difficulties. The findings also lend support to the transdiagnostic approach to mental health, which implies that psychological difficulties may be underpinned by the same cognitive and behavioural processes. Engaging in therapies such as group MBCT may mean that SUs do not need to access different psychological therapies for each presenting problem, which may reduce the amount of time needed to wait to receive useful interventions. More broadly, support for a transdiagnostic approach implies that diagnostic labels may not be as useful for the provision of useful therapeutic interventions as previously thought. It also implies that eliminating symptoms should not be the primary focus of therapeutic interventions. Furthermore, the transdiagnostic approach adopts a dimensional view of psychological distress, which may reduce the stigma associated with diagnostic labels.

The suggestion that control may be a core process underlying distress, implies that shifts in awareness of what is important to individuals may be enough to bring about changes in thoughts, feelings and behaviours. Thus, individuals could be supported to become more aware of what is important to them and how their current strategies and behaviours may create conflict with these values and cause them to become stuck. Group MBCT may facilitate the process of reorganisaton, but there may also be other therapies that facilitate this process.

Finally, the individuality of change should not be underestimated and individuals should be made aware that their recovery journey may differ from others. Set-

backs should be normalised as a part of this journey to reduce associated self-criticism and blame. Whilst individuals, and services, often tend to place importance on behavioural changes, it seems that maintaining hope and optimism and perhaps adopting a new perspective of one's current situation may be enough to bring about meaningful change for individuals.

4.4.2. Service Level

The findings of this preliminary study suggest that group MBCT is an acceptable intervention within a PCMHS. Based on these findings, the service will continue to offer drop-in group MBCT sessions within an existing Recovery College framework, with facilitation provided through the social enterprise used in the present study. Participant's reflections on helpful and unhelpful aspects of the group will inform adaptations when delivering these sessions.

The current PCMHS service was created to support successful transitions to primary care, where SUs would be expected to become more independent in managing their own care. Becoming more independent also seems to be important to individuals. However, it is important that staff and the service are aware that SUs may need different levels of support at different times and may need to be re-referred back to secondary care, perhaps more than once. For staff, it is important that this is not seen as a failure on their part. Thus, the findings of the current research will be fed back to staff within a team meeting.

In the longer-term, the service should consider whether quality indicators capture the non-linearity of change sufficiently. It may be that the perception of the role of the present service might instead be seen as facilitating transitions between primary care and secondary care, or a service to hold those who may be in temporary need of increased input.

4.4.3. Wider Implications

4.4.3.1. Immediate clinical implications
The current findings suggest that group MBCT can be used as a complimentary therapy within existing services, and may be particularly useful for services where there are high levels of co-morbidity and heterogeneity such as the

present service or secondary mental health care services. Transdiagnostic group therapies have the potential to be disseminated more broadly and more efficiently that disorder-specific therapies within these services.

The disparity between goal-based and symptom-based outcomes implies that what individuals deem to be meaningful change may not be reflected in outcomes routinely employed in service evaluation, which are largely driven by service and NHS priorities. The current research argues that services should focus on developing patient-led outcomes, to use alongside, or in place of current indicators of change. However, it is important that the individuality of change is also recognised within newly developed outcomes.

4.4.3.2. Longer-term clinical implications

Support for the transdiagnostic approach to mental health has longer term implications for the way that mental health problems are perceived and the way that mental health services within the UK are set up. Access to mental health services is currently reliant of diagnoses and many specialist services are consequently organised in line with disorder-focused models of care (e.g. specialist psychosis services anxiety services). The current findings do not suggest that current, disorder-focused NICE guidelines should be abandoned. Indeed, adopting the transdiagnostic approach to mental health would require a radical redesign of how mental health services operate. Firstly, there would need to be a means to assess who should receive support, perhaps based on levels of distress, as opposed to diagnoses. There are also a number of practical considerations regarding the organisation of services, as it would not be feasible for everyone to be seen within one site. Much more consideration would need to be given to these issues if services were to abandon the current diagnostic-system. Instead, current guidelines could be regarded as a work in progress and held with an openness to the possibility that there may be a more parsimonious explanation of distress.

4.4.3.3. Implications for research

The support for a transdiagnostic approach to mental health care has implications for future research and development of therapeutic interventions. The findings imply that research should focus on understanding the

transdiagnostic potential of therapies rather than continuing to develop and evaluate of disorder-focused models. Studies should also include those with co-morbid diagnoses, which would increase the ecological validity of findings and facilitate the implementation of therapies within services.

The study also highlighted the importance of adopting a mixed-methods research design. As a researcher, it is important to understand the wider context when interpreting quantitative data. If one only considered the quantitative data collected in the present study it would seem as though participants' scores were influenced solely by the group, which given the modest changes observed, may have led to the conclusion that the group was not particularly helpful. However, during interviews, it was discovered that there were events outside of the group that seemed to explain, and changed the interpretation of, the data.

4.5. Limitations

4.5.1. Sample Size and Sample Diversity

The current study was a pilot and therefore provides preliminary evidence for the usefulness of MBCT delivered within a transdiagnostic format. However, the small sample size employed may have limited the range of diagnoses and psychological difficulties that were studied. For example, only one participant reported experiencing symptoms of psychosis (auditory hallucinations). This not only limits the generalisability of findings to those accessing PCMHSs but also limits the extent to which definitive conclusions can be made regarding the broader transdiagnostic potential of group MBCT.

Although there was a range of ethnicities reflected in the study sample, all participants were female, which further limits the generalisability of the findings. Furthermore, two of the three participants who failed to start the group were men. Data relating to access to mental health services within the UK indicate that 5% of females and 4.8% of males between the ages of 18-40 access secondary mental health care services, whilst there are no gender differences

indicated beyond the age of 40 (Baker, 2018). Thus, the sample recruited in unlikely to be representative of the of the wider population accessing PCMHSs.

It is possible that this might reflect wider gender biases in the uptake of psychological interventions (e.g. Addis & Mahalik, 2003), but may also reflect bias with the recruitment of participants. Despite consultations with SNPs prior to recruitment, it is possible that women were more likely to be approached, based on beliefs about who might be willing to take part or who might benefit from the group. It may be necessary to take steps to redress these disparities in future research. For example, men may require a more personalised approach or recruited via leaflets left in GP surgeries as opposed to being approached in person.

4.5.2. Lack of Multiple Baseline Measures

A Small-N, multiple baseline design could have been used had baseline measures been collected on more than one occasion prior to the intervention. This would have allowed for comparisons of changes within the baseline phase and thus provided a better understanding of the impact the group alone. However, within the ethical approval provided for the study, it was not possible to collect data from participants prior to full informed consent being taken in person. Informed consent was collected immediately prior to commencement of the first group session due to the wide geographical area covered by the GP-based service, and the minimal contact between SUs and SNPs (approximately one contact every 3 months). Secondly, given the number of measures collected, it was considered that trying to obtain multiple baseline data before commencement of the group may have deterred participants from attending.

4.6. Future Research

Given the lack of previous research investigating the transdiagnostic potential of group MBCT within this population, the current research was considered to be a preliminary study and employed a small-N design. It is therefore difficult to make claims about the generalisability of findings to the wider population of SUs in PCMHSs. In order to consolidate the current findings and roll-out group

MBCT within this population, future studies should aim to employ larger sample sizes so that quantitative analysis can be conducted on the data. This might be achieved by running the group several times within a single service, or running groups across multiple sites. The latter design would also provide more generalisable findings regarding the effectiveness of group MBCT across services with different demographic compositions.

There are also other services that may benefit from transdiagnostic group MBCT including secondary care services and older adults' mental health services. Older adults are often excluded from research into psychological therapies (Malzfeldt, 2013), yet group MBCT offers a potentially unique application within this population. Older adults are more likely to experience comorbid physical and mental health problems. The focus on connectedness between the mind and body within mindfulness, and research into the effectiveness of MBIs for physical health problems and pain (e.g. Kabat-Zinn, 1982; Kabat-Zinn et al., 1998; Speca, Carlson, Goodey & Angen, 2000), suggests that this may be a particularly promising intervention within this population (Smith, 2004). Furthermore, the over-subscribing of medication within this group may mean that some older adults would prefer non-pharmacological interventions, as well as having more time for between session practice due to retirement (Smith, 2004).

Given the diversity of the sample recruited, an interesting area for further exploration would be group cohesiveness. Group cohesiveness has been described by Yalom (1995, p.50) as a necessary precursor for effective group therapy. It has been studied extensively within group therapy literature (e.g. Budman, Soldz, Demby, & Davis, 1993; Marziali, Munroe-Blum, & McCleary, 1997; Yalom & Rand, 1966) as has been described at the "therapeutic alliance" counterpart of group therapy (Budman et al., 1993). Participant 2, who seemed to find the group less useful, was younger and culturally different from other group members, which may have precluded some of the non-specific benefits of group therapy (e.g. Yalom, 1995). Future studies could use measures of group cohesion (e.g. Group Questionnaire; Johnson, Burlingame, Olsen, Davies & Gleave, 2005) to understand the influence of this factor on group experience and outcomes.

4.7. Reflexive Review

Reflexivity is an important aspect in conducting ethical research (Attia & Edge, 2017) and thus it was important to consider the impact that I had on the research (prospective) and the impact that the research had on me (retrospective).

4.8.1. Prospective Reflection

Practicing and delivering MBIs for over four years undoubtedly influenced my decision to undertake this research. I tried to remain mindful of the potential influence that his might have on my approach to the work, particularly when analysing and drawing inferences from the findings. The transdiagnostic approach to mental health reflects my own understanding of psychological distress, and so it was necessary to consider how this might have affected my thought processes at each stage of the research. My efforts to remain objective throughout the process was aided by my background in research and my commitment to upholding a high-quality evidence base.

Analysis of the qualitative data was the most challenging aspect of the research and was inevitably influenced by my prior knowledge of the evidence-base. To maintain as much objectivity as possible, I refrained from reading literature surrounding the experience of change and recovery until completing the analysis. I also considered how personal characteristics, for example being a female, may have influenced my interpretations, and wondered how participant disclosure and interpretation might have differed had the researcher been male.

4.8.2. Retrospective Reflection

Applying for ethical approval took several months, which made me reflect on the reluctance of fellow Trainees and clinicians in general, to undertake clinic-based research. I also worried whether the request to increase the amount of information within the PIS and include information about potential harms may

have deterred SUs from taking part, which led me to reflect on the potential negative impact of the review process.

My relationship to the work admittedly changed as the research progressed. Upon hearing the stories and difficulties faced by the women who took part, I came to appreciate the importance of the project, beyond the purpose of my thesis. As identified in the qualitative analysis, for some, simply attending the group provided a routine and a chance to "do something for me." This incentivised me to liaise with the social enterprise, who agreed to continue offering group MBCT within the service.

When adopting a mixed-methods design, I was aware that the scale of the research would be a challenge, however I underestimated how difficult it would be to do justice to both quantitative and qualitative elements within the report. This has been one of the most difficult pieces of work I have undertaken and there were certainly times when I felt I had lost control. I often found myself engaging in many of the cognitive and behavioural transdiagnostic processes that I was studying and frequently relied on friends and family to help me break out of these. However, I believe that this is the most liberating aspect of the transdiagnostic approach. It erases the arbitrary lines that psychiatric diagnoses draw between normality and abnormality of experience. Without taking away from the real suffering of participants, I was left with a profound sense that these women were not "ill", they had just become stuck in their endeavour to feel better.

5.0. CONCLUSION

The current research provides preliminary evidence for the acceptability and usefulness of group MBCT within a transdiagnostic clinical population, and reflects a potentially unique application of this intervention within a PCMHS. This was reflected on goal-based outcomes, process-based measures and in qualitative interviews but not on symptom-based measures, which highlights a potential disparity between the priorities of NHS services and meaningful change. Changes were most consistently seen on measures of cognitive and behavioural transdiagnostic processes and reorganisation of conflict. A tentative conclusion based on the relationship found between these measures, is that "control" could be a core process which underlies these trandiagnostic processes, and may therefore provide a parsimonious account of psychological distress. This was mirrored in the way participants described their experience of change as "becoming unbound" from their distress and "taking back control" over their lives. Whilst the group provided a vehicle for change, the road to recovery was unique for each participant, guided by their own personal values and goals and re-routed as they became aware of new possibilities. The inevitable set-backs and personal challenges they encountered along the way were an important part of this journey and, when little else changed, it was the act of trying that offered hope that they were not "completely losing grip". These findings have implications for the kinds of therapies offered within services with high levels of comorbidity and heterogeneity, and have longer-term implications for the way that services conceptualise, measure and respond to psychological distress.

6.0. REFERENCES

Aderka, I. M., Nickerson, A., Bøe, H. J., & Hofmann, S. G. (2012). Sudden gains during psychological treatments of anxiety and depression: A meta-analysis. *Journal of consulting and clinical psychology*, *80*(1), 93.

Addis, M. E., Wade, W. A., & Hatgis, C. (1999). Barriers to dissemination of evidence-based practices: Addressing practitioners' concerns about manual-based psychotherapies. *Clinical Psychology: Science and Practice*, *6*(4), 430-441.

Addis, M. E., & Mahalik, J. R. (2003). Men, masculinity, and the contexts of help seeking. *American Psychologist, 58*(1), 5-14.

http://dx.doi.org/10.1037/0003-066X.58.1.5

Aldao, A., & Nolen-Hoeksema, S. (2010). Specificity of cognitive emotion regulation strategies: A transdiagnostic examination. *Behaviour research and therapy*, *48*(10), 974-983.

American Psychiatric Publishing. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Andrews, G., Goldberg, D. P., Krueger, R. F., Carpenter, W. T., Hyman, S. E., Sachdev, P., & Pine, D. S. (2009). Exploring the feasibility of a meta-structure for DSM-V and ICD-11: could it improve utility and validity?: Paper 1 of 7 of the thematic section:'A proposal for a meta-structure for DSM-V and ICD-11'. *Psychological Medicine*, *39*(12), 1993-2000.

Aragona, M. (2009). The role of comorbidity in the crisis of the current psychiatric classification system. *Philosophy, Psychiatry, & Psychology*, *16*(1), 1-11.

Attia, M., & Edge, J. (2017). Be(com)ing a reflexive researcher: a developmental approach to research methodology. *Open Review of Educational Research*, 4 (1), 33-45.

Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical psychology: Science and practice*, *10*(2), 125-143.

Baer, R. A. (2007). Mindfulness, assessment, and transdiagnostic processes. *Psychological Inquiry*, *18*(4), 238-242.

Baer, R. A. (2011). Measuring mindfulness. *Contemporary Buddhism*, *12*(01), 241-261.

Baer R. A., Carmody J., & Hunsinger M. (2012). Weekly change in mindfulness and perceived stress in a mindfulness-based stress reduction program. *Journal of Clinical Psychology*, 68, 755–765. 10.1002/jclp.21865

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*(1), 27-45.

Baker, C. (2018). Mental health problems: statistics on prevalence and services. House of Commons Library. Briefing paper Number 6988. http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN06988

Barlow, D. H., Allen, L. B., & Choate, M. L. (2004). Toward a unified treatment for emotional disorders. *Behavior therapy*, *35*(2), 205-230.

Barnhofer, T., Crane, C., Hargus, E., Amarasinghe, M., Winder, R., & Williams, J. M. G. (2009). Mindfulness-based cognitive therapy as a treatment for chronic depression: A preliminary study. *Behaviour research and therapy*, *47*(5), 366-373.

Basco, M. R., & Rush, A. J. (2005). *Cognitive-behavioral therapy for bipolar disorder*. Guilford Press.

Bearance, D. (2014). Mindfulness in Moments of Crisis. *The Journal of Educational Thought (JET) / Revue De La Pensée Éducative, 47*(1/2), 60-70. Retrieved from http://www.jstor.org/stable/24713052

Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. University of Pennsylvania Press.

Beck, A. T. (1976). Cognitive therapy and emotional disturbances.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). Cognitive therapy of depression. The Guilford clinical psychology and psychotherapy series.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Beck depression inventory-II. *San Antonio*, *78*(2), 490-498.

Beck, R., & Perkins, T. S. (2001). Cognitive content-specificity for anxiety and depression: A meta-analysis. *Cognitive Therapy and Research*, *25*(6), 651-663.

Bell, V., Halligan, P. W., & Ellis, H. D. (2006). The Cardiff Anomalous Perceptions Scale (CAPS): a new validated measure of anomalous perceptual experience. *Schizophrenia bulletin*, *32*(2), 366-377.

Bhaskar, R., & Lawson, T. (1998), "General introduction", in Archer, M.S., Bhaskar, R., Collier, A., Lawson, T., & Norries, A. (Eds), Critical Realism: Essential Readings, Routledge, London

Bijl, R. V., & Ravelli, A. (2000). Psychiatric morbidity, service use, and need for care in the general population: results of The Netherlands Mental Health Survey and Incidence Study. *American journal of public health*, *90*(4), 602.

Binder, P. E., Holgersen, H., & Moltu, C. (2012). Staying close and reflexive: An explorative and reflexive approach to qualitative research on psychotherapy. *Nordic Psychology*, *64*(2), 103-117.

Bird, T. (2013). An investigation of transdiagnostic processes and interventions in clinical and non-clinical settings. (Unpublished doctoral thesis). University of Manchester, Manchester, UK.

Bird, T., Mansell, W., & Tai, S. J. (2009). Method of levels: Initial steps in assessing adherence and the development of a qualitative framework for mapping clients' control hierarchies. *The Cognitive Behaviour Therapist, 2,* 145–166.

Bloom, M., Fischer, J., & Orme, J. G. (1995). *Evaluating practice: Guidelines for the accountable professional*. Boston: Allyn and Bacon.

Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Waltz, T., & Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionniare - II: A revised measure of psychological flexibility and experiential avoidance. *Behavior Therapy, 42,* 676-688.

Borkovec, T. D., Abel, J. L., & Newman, H. (1995). Effects of psychotherapy on comorbid conditions in generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, *63*(3), 479.

Bracken, P., Thomas P. (2004). Hope. *Open Mind, 130,* 10.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Brown, T. A., Antony, M. M. and Barlow, D. H. (1995). Diagnostic comorbidity in panic disorder: effect on treatment outcome and course of comorbid diagnoses following treatment. *Journal of Consulting and Clinical Psychology,63*, 408–418

Brown, T.A., Dinardo, P.A., & Barlow, D. (1994). Anxiety disorders interview schedule for DSM-IV. New York: Oxford University Press.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of personality and social psychology*, *84*(4), 822.

Budman, S. H., Soldz, S., Demby, A., & Davis, M. (1993). What is cohesiveness? An empirical investigation. *Small Group Research, 24*(2), 199–216.

Burg, J. M., & Michalak, J. (2011). The healthy quality of mindful breathing: Associations with rumination and depression. *Cognitive Therapy and Research*, *35*(2), 179-185.

Burns, D. D., & Spangler, D. L. (2001). Do changes in dysfunctional attitudes mediate changes in depression and anxiety in cognitive behavioral therapy?. *Behavior Therapy*, *32*(2), 337-369.

Capobianco, L., Reeves, D., Morrison, A. P., & Wells, A. (2018). Group Metacognitive Therapy vs. Mindfulness Meditation Therapy in a Transdiagnostic Patient Sample: A Randomised Feasibility Trial. *Psychiatry research*, *259*, 554-561.

Carey, T. A. (2008). Perceptual control theory and the method of levels: Further contributions to a transdiagnostic perspective. *International Journal of Cognitive Therapy*, *1*(3), 237-255.

Carey, T.A. (2001). Investigating the role of redirecting awareness in the change process: A case study using the method of levels. *International Journal of Reality Therapy,* 20(2), 26-30.

Carmody, J. (2009). Evolving conceptions of mindfulness in clinical settings. *Journal of Cognitive Psychotherapy*, *23*(3), 270.

Carvalho, S., Martins, C. P., Almeida, H. S., & Silva, F. (2017). The evolution of cognitive behavioural therapy–The third generation and its effectiveness. *European Psychiatry*, *41*, S773-S774.

Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality–social, clinical, and health psychology. *Psychological bulletin*, *92*(1), 111.

Castonguay, L. G. (2011). Psychotherapy, psychopathology, research and practice: Pathways of connections and integration. *Psychotherapy Research*, *21*(2), 125-140.

Chadwick, P. (2006). *Person-based cognitive therapy for distressing psychosis*. John Wiley & Sons.

Chadwick, P. (2014). Mindfulness for psychosis. *The British Journal of Psychiatry*, *204*(5), 333-334.

Chadwick, P., Hughes, S., Russell, D., Russell, I., & Dagnan, D. (2009). Mindfulness groups for distressing voices and paranoia: a replication and randomized feasibility trial. *Behavioural and Cognitive Psychotherapy*, *37*(4), 403-412.

Clark, D. A. (2004). *Cognitive-behavioral therapy for OCD*. Guilford Press.

Clark, D. A., & Taylor, S. (2009). The transdiagnostic perspective on cognitive-behavioral therapy for anxiety and depression: new wine for old wineskins?. *Journal of Cognitive Psychotherapy*, *23*(1), 60.

Clark, D. M. (1986). A cognitive approach to panic. *Behaviour research and therapy*, *24*(4), 461-470.

Clark, D. M. (1988). A cognitive model of panic attacks.

Clark, D. M., & Ehlers, A. (2004). Posttraumatic stress disorder: From cognitive theory to therapy.

Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. *Social phobia: Diagnosis, assessment, and treatment*, *41*(68), 00022-3.

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American psychologist*, *54*(10), 805.

Cowdrey, F. A., & Park, R. J. (2012). The role of experiential avoidance, rumination and mindfulness in eating disorders. *Eating behaviors*, *13*(2), 100-105.

Crane, R. (2009). *The CBT distinctive features series. Mindfulness-based cognitive therapy: Distinctive features.* New York, NY, US: Routledge/Taylor & Francis Group.

Crane, C., Winder, R., Hargus, E., Amarasinghe, M., & Barnhofer, T. (2012). Effects of mindfulness-based cognitive therapy on specificity of life goals. *Cognitive therapy and research*, *36*(3), 182-189.

Davidson, K. M. (2000). *Cognitive therapy for personality disorders: a guide for therapists*. Hodder Arnold.

DeRubeis, R. J., Siegle, G. J., & Hollon, S. D. (2008). Cognitive therapy versus medication for depression: treatment outcomes and neural mechanisms. *Nature Reviews Neuroscience*, *9*(10), 788.

Dobson, K. S., Hollon, S. D., Dimidjian, S., Schmaling, K. B., Kohlenberg, R. J., Gallop, R. J., ... & Jacobson, N. S. (2008). Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the prevention of relapse and recurrence in major depression. *Journal of consulting and clinical psychology*, *76*(3), 468.

Dugas, M. J. (2004). CBT for GAD: Learning to tolerate uncertainty and emotional arousal. In *34th EABCT Conference, Manchester, UK*.

Eisendrath, S. J., Delucchi, K., Bitner, R., Fenimore, P., Smit, M., & McLane, M. (2008). Mindfulness-based cognitive therapy for treatment-resistant depression: a pilot study. *Psychotherapy and Psychosomatics*, *77*(5), 319-320.

Egan, S. J., Wade, T. D., & Shafran, R. (2011). Perfectionism as a transdiagnostic process: A clinical review. *Clinical psychology review*, *31*(2), 203-212.

Ellis, A. (1958). Rational psychotherapy. *The Journal of General Psychology*, *59*(1), 35-49.

Farias, M., Wikhom, C., (2016). Has the science of mindfulness lost its mind? *BJPsych Bulletin, 40(6)*, 329-332. doi: 10.1192/pb.bp.116.053686.

Field, A. P., & Cartwright–Hatton, S. (2008). Shared and unique cognitive factors in social anxiety. *International Journal of Cognitive Therapy*, *1*(3), 206-222.

Finucane, A., & Mercer, S. W. (2006). An exploratory mixed methods study of the acceptability and effectiveness of mindfulness-based cognitive therapy for patients with active depression and anxiety in primary care. *BMC psychiatry*, *6*(1), 14.

Flett, G. L., Coulter, L. M., Hewitt, P. L., & Nepon, T. (2011). Perfectionism, rumination, worry, and depressive symptoms in early adolescents. *Canadian Journal of School Psychology*, *26*(3), 159-176.

Foa, E. B., Hembree, E. A., Cahill, S. P., Rauch, S. A., Riggs, D. S., Feeny, N. C., & Yadin, E. (2005). Randomized trial of prolonged exposure for posttraumatic stress disorder with and without cognitive restructuring: outcome at academic and community clinics. *Journal of consulting and clinical psychology*, *73*(5), 953.

Foa, E. B., Huppert, J. D., Leiberg, S., Langner, R., Kichic, R., Hajcak, G., & Salkovskis, P. M. (2002). The Obsessive-Compulsive Inventory: development and validation of a short version. *Psychological assessment*, *14*(4), 485.

Freedman, R., Lewis, D. A., Michels, R., Pine, D. S., Schultz, S. K., Tamminga, C. A., ... Yager, J. (2013). The initial field trials of DSM-5: New blooms and old thorns. *American Journal of Psychiatry*, *170*(1), 1-5. DOI: 10.1176/appi.ajp.2012.12091189

Garety, P. A., Kuipers, E., Fowler, D., Freeman, D., & Bebbington, P. E. (2001). A cognitive model of the positive symptoms of psychosis. *Psychological medicine*, *31*(2), 189-195.

Garner et al. (1982). The Eating Attitudes Test: Psychometric features and clinical correlates. *Psychological Medicine,* 12, 871-878.

Geschwind, N., Peeters, F., Huibers, M., van Os, J., & Wichers, M. (2012). Efficacy of mindfulness-based cognitive therapy in relation to prior history of depression: randomised controlled trial. *The British Journal of Psychiatry, 201*(4), 320-325.

Goldberg, S.B., Tucker, R.P., Greene, P.A., Davidson, R.J., Wampold, B.E., Kearney, D.J., et al. (2018) Mindfulness-based interventions for psychiatric disorders: a systematic review and meta-analysis. *Clinical Psychology Review, 59*, 52–60.

Goldin, P. R., & Gross, J. J. (2010). Effects of mindfulness-based stress reduction (MBSR) on emotion regulation in social anxiety disorder. *Emotion, 10*(1), 83.

Gould A., DeSouza S. & Rebeiro-Gruhl K.(2005) And then I lost that life: a shared narrative of four young men with schizophrenia. *British Journal of Occupational Therapy, 68,* 467-473

Gu, J., Strauss, C., Crane, C., Barnhofer, T., Karl, A., Cavanagh, K., & Kuyken, W. (2016). Examining the factor structure of the 39-item and 15-item versions of the Five Facet Mindfulness Questionnaire before

and after mindfulness-based cognitive therapy for people with recurrent depression. *Psychological Assessment, 28*, 791–802.

Greeson, J., & Brantley, J. (2009). Mindfulness and anxiety disorders: Developing a wise relationship with the inner experience of fear. In *Clinical handbook of mindfulness* (pp. 171-188). Springer, New York, NY.

Greeson, J., Brantley, J., Smoski, M., Ekblad, A., Fikkan, J., Lynch, T., Webber, D., Llabre, M., Suarez, E., & Wolever, R. (2010). Transdiagnostic risk factor reduction during mindfulness meditation training: How changes in positive emotional experience explain reduced symptoms of anxiety and depression. [Abstract]. *Proceedings of the 5th International Congress on Complementary Medicine Research.*

Greeson, J., Garland, E. L., & Black, D. (2014). A Transtherapeutic approach for transdiagnostic mental processes. *W: A. Christelle, T. Ngnoumen, EJ Langer (red.) The Wiley Blackwell handbook of mindfulness*, 533-562.

Groves, P. (2016). Mindfulness in psychiatry–where are we now?. *British Journal of Psychiatry Bulletin, 40*(6), 289-292.

Gunaratana, V. H. M. (2002). Mindfulness in Plain English. 1990. *Berkerly, CA*.

Harvey, A. G., Watkins, E. R., Mansell, W., & Shafran, R. (2004). Cognitive behavioural processes across disorders. *Oxford University Press: USA*

Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior therapy*, *35*(4), 639-665.

Hayes, S. C., Strosahl, K. D., Bunting, K., Twohig, M., & Wilson, K. G. (2004). What is acceptance and commitment therapy?(pp. 1–30). *A practical guide to acceptance and commitment therapy. New York: Springer*.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy* (p. 6). New York: Guilford Press.

Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of consulting and clinical psychology*, *64*(6), 1152.

Hepburn, S. R., Crane, C., Barnhofer, T., Duggan, D. S., Fennell, M. J., & Williams, J. M. G. (2009). Mindfulness-based cognitive therapy may reduce thought suppression in previously suicidal participants: Findings from a preliminary study. *British Journal of Clinical Psychology*, *48*(2), 209-215.

Heugten-Van Der Kloet, V., & van Heugten, T. (2015). The classification of psychiatric disorders according to DSM-5 deserves an internationally standardized psychological test battery on symptom level. *Frontiers in psychology*, *6*, 1108.

Heun, R., Bonsignore, M., Barkow, K., & Jessen, F. (2001). Validity of the five-item WHO Well-Being Index (WHO-5) in an elderly population. *European archives of psychiatry and clinical neuroscience*, *251*(2), 27-31.

Hickman., S. (2017, May 22). How to meditate when you're anxious. Retrieved from https://www.mindful.org/meditate-youre-anxious/

Higginson, S., & Mansell, W. (2008). Article. *Psychology and Psychotherapy-Theory Research and Practice, 81*, 309−328.

Higginson, S., & Mansell, W. (2008). What is the mechanism of psychological change? A qualitative analysis of six individuals who experienced personal change and recovery. *Psychology and Psychotherapy-Theory Research and Practice, 81*, 309-328. doi: 10.1348/147608308x320125

Higginson, S., Mansell, W., & Wood, A. M. (2011). An integrative mechanistic account of psychological distress, therapeutic change and recovery: The perceptual control theory approach. *Clinical Psychology Review*, *31*(2), 249-259.

Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive therapy and research*, *36*(5), 427-440.

Hofmann, S. G., & DiBartolo, P. M. (Eds.). (2014). *Social anxiety: Clinical, developmental, and social perspectives*. Elsevier.

Hollon, S. D., Muñoz, R. F., Barlow, D. H., Beardslee, W. R., Bell, C. C., Bernal, G.,& Linehan, M. M. (2002). Psychosocial intervention development for the prevention and treatment of depression: promoting innovation and increasing access. *Biological psychiatry*, *52*(6), 610-630.

Holttum, S. (2012) "Research watch: recovery as a personal journey: how mental health services are trying to support it", *Mental Health and Social Inclusion*,16(4), 169-174, https://doi.org/10.1108/20428301211281014

Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single subject research to identify evidence- based practice in special education. *Exceptional Children, 71*, 165-179.

Huffziger, S., & Kuehner, C. (2009). Rumination, distraction, and mindful self-focus in depressed patients. *Behaviour Research and Therapy*, *47*(3), 224-230.

Hurley, J. (1989). Affiliativeness and outcome in interpersonal groups: Member and leader perspectives. *Psychotherapy, 26,* 520–523.

Ietsugu, T., Crane, C., Hackmann, A., Brennan, K., Gross, M., Crane, R. S., ... & Williams, J. M. G. (2015). Gradually getting better: Trajectories of change in rumination and anxious worry in mindfulness-based cognitive therapy for prevention of relapse to recurrent depression. *Mindfulness*, *6*(5), 1088-1094.

Insel, T., Cuthbert, B., Garvey, M., Heinssen, R., Pine, D. S., Quinn, K., & Wang, P. (2010). Research domain criteria (RDoC): toward a new classification framework for research on mental disorders.

Jacobson N. (2004) *In Recovery: The Making of Mental Health Policy*. Vanderbilt University Press, Nashville.

Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., & Prince, S. E. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of consulting and clinical psychology*, *64*(2), 295.

Jacobson, N. S., & Truax, P. (1991). Clinical significance: a statistical approach to defining meaningful change in psychotherapy research. *Journal of consulting and clinical psychology*, *59*(1), 12.

Johnson, R.B., Onwuegbuzie, A.J. and Turner, L.A. (2007) Toward a Definition of Mixed Methods Research. *Journal of Mixed Methods Research, 1,* 112-133. http://dx.doi.org/10.1177/1558689806298224

Johnson, J. E., Burlingame, G. M., Olsen, J. A., Davies, D. R., & Gleave, R. L. (2005). Group climate, cohesion, alliance, and empathy in group psychotherapy: Multilevel structural equation models. *Journal of Counseling Psychology*, *52*, 310–321. doi: 10.1034/0022- 1067.52.3.310

Kabat-Zinn, J. (1982). An outpatient program in behavioural medicine for chronic pain patients based on the practice of mindfulness meditation. *General Hospital Psychiatry*, 4, 33–47.

Kabat-Zinn, J. (2005). *Coming to our senses: Healing ourselves and the world through mindfulness*. UK: Hachette.

Kabat-Zinn, J. (2011). Some reflections on the origins of MBSR, skillful means, and the trouble with maps. *Contemporary Buddhism*, *12*(01), 281-306.

Kabat-Zinn, J., & Hanh, T. N. (2009). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Delta.

Kabat-Zinn, J., Wheeler, E., Light, T. et al. (1998). Influence of a mindfulness meditation-based stress reduction intervention on rates of skin clearing in patients with moderate to severe psoriasis undergoing phototherapy (UVB) and photochemotherapy (PUVA). *Psychosomatic Medicine*, 60, 625–632.

Kenny, M. A., & Williams, J. M. G. (2007). Treatment-resistant depressed patients show a good response to mindfulness-based cognitive therapy. *Behaviour research and therapy*, *45*(3), 617-625.

Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, *62*(6), 617-627.

Khoury, B., Lecomte, T., Gaudiano, B. A., & Paquin, K. (2013). Mindfulness interventions for psychosis: a meta-analysis. *Schizophrenia research*, *150*(1), 176-184.

Kingston, T., Dooley, B., Bates, A., Lawlor, E., & Malone, K. (2007). Mindfulness-based cognitive therapy for residual depressive symptoms. *Psychology and Psychotherapy: Theory, research and practice*, *80*(2), 193-203.

Kirk, S. A., & Kutchins, H. (1992). The selling of DSM. *The rhetoric ofscience in psychiatry New York: Aldine de Gruyter*.

Klinger, E. (1996). Emotional influences on cognitive processing, with implications for theories of both. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 168-189). New York, NY, US: Guilford Press.

Knight, R. W., Bean, J., Wilton, A. S., & Lin, E. (2015). Cost-effectiveness of the mindfulness-based stress reduction methodology. *Mindfulness*, *6*(6), 1379-1386.

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613. http://dx.doi.org/10.1046/j.1525-1497.2001.016009606.x

Kuijpers, H. J., Van der Heijden, F. M. M. A., Tuinier, S., & Verhoeven, W. M. A. (2007). Meditation-induced psychosis. *Psychopathology*, *40*(6), 461-464.

Kuyken, W., & Dalgleish, T. (1995). Autobiographical memory and depression. *British Journal of Clinical Psychology*, *34*(1), 89-92.

Kuyken W, Hayes R, Barrett B, Byng R, Dalgleish T, Kessler D…Byford, S. (2015). Effectiveness and cost-effectiveness of mindfulness-based cognitive therapy compared with maintenance antidepressant treatment in the prevention of depressive relapse or recurrence (PREVENT): a randomised controlled trial. *Lancet, 386,* 63–73

Kuyken, W., Warren, F. C., Taylor, R. S., Whalley, B., Crane, C., Bondolfi, G., ... & Segal, Z. (2016). Efficacy of mindfulness-based cognitive therapy in prevention of depressive relapse: an individual patient data meta-analysis from randomized trials. *JAMA psychiatry*, *73*(6), 565-574.

Lamberton, A., & Oei, T. P. (2008). A test of the cognitive content specificity hypothesis in depression and anxiety. *Journal of Behavior Therapy and Experimental Psychiatry*, *39*(1), 23-31.

Langer, E. J. (1989). Minding matters: The consequences of mindlessness–mindfulness. In *Advances in experimental social psychology* (Vol. 22, pp. 137-173). Academic Press.

Lapadat, J.C. and Lindsay, A.C. 1999: Transcription in research and practice: from standardization of technique to interpretive positionings. *Qualitative Inquiry,* 5, 64 86.

Laposa, J. M., Collimore, K. C., & Rector, N. A. (2014). Is post-event processing a social anxiety specific or transdiagnostic cognitive process in the anxiety spectrum?. *Behavioural and cognitive psychotherapy*, *42*(6), 706-717.

Law, D., & Bradley, J. (2014). Goal Based Outcomes (GBOs). In D. Law & M. Wolpert (Eds.), *Guide to Using Outcomes and Feedback Tools with Children, Young People and Families (2nd ed.,* pp. 129–136*)*. London: CAMHS Press.

Leary, M. R., & Kowalski, R. M. (1995). The self-presentation model of social phobia. *Social phobia: Diagnosis, assessment, and treatment*, 94-112.

Lester H., Tritter J., & Sorohan H. (2005) Patients' and health professionals' views on primary care for people with serious mental illness: focus group study. *British Medical Journal, 330,* 1122.

Linehan, M. M. (1993). *Skills training manual for treating borderline personality disorder*. Guilford Press.

Luborsky, L., Rosenthal, R., Diguer, L., Andrusyna, T. P., Berman, J. S., Levitt, J. T., & Krause, E. D. (2002). The dodo bird verdict is alive and well—mostly. *Clinical Psychology: Science and Practice, 9*(1), 2–12. doi: 10.1093/clipsy.9.1.2

Longmore, R. J., & Worrell, M. (2007). Do we need to challenge thoughts in cognitive behavior therapy? *Clinical psychology review*, *27*(2), 173-187.

MacKay L. (2005). *A Story of Personal Recovery* [online]. Scottish Recovery Network, Glasgow*.* Available at: http://www.scottishrecovery.net

Madani, N. A. M., Kananifar, N., Atashpour, S. H., & Habil, M. (2013). The effects of mindfulness group training on the rate of obsessive-compulsive disorder symptoms on the women in Isfahan City (Iran). *International medical journal, 20*(1), 13-17.

Magliano, L., Strino, A., Punzo, R., Acone, R., Affuso, G., & Read, J. (2017). Effects of the diagnostic label 'schizophrenia', actively used or passively accepted, on general practitioners' views of this disorder. *International Journal of Social Psychiatry*, *63*(3), 224-234.

Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. *The lancet*, *358*(9280), 483-488.

Malzfeldt, A. (2013). New Voices: A mindful moment for older adults. The Psychologist, 26(5), 376-377.

Mansell, W., & McEvoy, P. M. (2017). A test of the core process account of psychopathology in a heterogenous clinical sample of anxiety and depression: A case of the blind men and the elephant?. *Journal of anxiety disorders*, *46*, 4-10.

Maj, M. (2005). 'Psychiatric comorbidity': an artefact of current diagnostic systems?. *The British Journal of Psychiatry*, *186*(3), 182-184.

Mansell, W. (2005). Control theory and psychopathology: An integrative approach. *Psychology and Psychotherapy: Theory, Research and Practice*, *78*(2), 141-178.

Mansell, W., Carey, T. A., & Tai, S. J. (2015). *Principles-based counselling and psychotherapy: A Method of Levels approach*. Routledge.

Mansell, W., Harvey, A., Watkins, E. R., & Shafran, R. (2008). Cognitive behavioral processes across psychological disorders: A review of the utility and validity of the transdiagnostic approach. *International Journal of Cognitive Therapy*, *1*(3), 181-191.

Marks, I.M., Mathews (1979). Brief standard self-rating for phobic patients. *Behavior Research and Therapy, 17,* 263-167.

Marziali, E., Munroe-Blum, H., & McCleary, L. (1997). The contribution of group cohesion and group alliance to the outcome of group psychotherapy. *International Journal of Group Psychotherapy, 47,* 475–497.

McEvoy, P. M., Erceg-Hurn, D. M., Anderson, R. A., Campbell, B. N. C., Swan, A., Saulsman, L. M., Summers, M., & Nathan, P. R. (2015). Group metacognitive therapy for repetitive negative thinking in primary and non-primary generalized anxiety disorder: an effectiveness trial. *Journal of Affective Disorders, 175*, 124-132.

McEvoy, P. M., Mahoney, A. E., & Moulds, M. L. (2010). Are worry, rumination, and post-event processing one and the same?: Development of the Repetitive Thinking Questionnaire. *Journal of Anxiety Disorders*, *24*(5), 509-519.

McManus, F., Surawy, C., Muse, K., Vazquez-Montes, M., & Williams, J. M. G. (2012). A randomized clinical trial of mindfulness-based cognitive therapy versus unrestricted services for health anxiety (hypochondriasis). *Journal of consulting and clinical psychology*, *80*(5), 817.

Meier, M. A., & Meier, M. H. (2017). Clinical Implications of a General Psychopathology Factor: A Cognitive–Behavioral Transdiagnostic Group Treatment for Community Mental Health.

Mirowsky, J., Ross, C.E. (2002) Measurement for a human science. *Journal of Health and Social Behaviour, 43,* 152-170

Morrison, A. P. (2001). The interpretation of intrusions in psychosis: an integrative cognitive approach to hallucinations and delusions. *Behavioural and Cognitive Psychotherapy*, *29*(3), 257-276.

Mota NP, Tsai J, Sareen J, et al. (2016). High burden of subthreshold DSM-5 post-traumatic stress disorder in U.S. military Veterans. *World Psychiatry,* 15, 185–6.

Narrow, W.E., & Kuhl, E.A., (2011). Dimensional approaches to psychiatric diagnosis in DSM-5. *Journal of Mental Health Policy Economics, 14* (4), 197-200

Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and identity*, *2*(3), 223-250.

Newman, C. F., Leahy, R. L., Beck, A. T., Reilly-Harrington, N. A., & Gyulai, L. (2002). *Bipolar disorder: a cognitive therapy approach*. American Psychological Association.

Newton, D., & Fellow, D., (2017) Primary Care Mental Health Service Development: Scoping of the current state of services across the thirty-two London boroughs. Healthy London Partnership (2017) Retrieved from: https://www.myhealth.london.nhs.uk

Oliveira-Maia AJ, Mendonça C, Pessoa MJ, Camacho M, Gago J. (2016). The mental health recovery measure can be used to assess aspects of both customer-based and service-based recovery in the context of severe mental illness. *Front Psychology*, 7, 1679. doi: 10.3389/fpsyg.2016.01679

Patel, T., Mansell, W., & Veale, D. (2015). The cognitive behavioural processes questionnaire: a preliminary analysis within student, mixed clinical and community samples and the identification of a core transdiagnostic process. *Cognitive Therapy and Research*, *39*(2), 193-203.

Patton, M. (1990). *Qualitative evaluation and research methods.* Newbury Park: Sage.

Patton, M. Q., & Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, Calif: Sage Publications.

Pavlov, I. P. (1928). The reflex of purpose. *Lectures on conditioned reflexes*, *1*, 275-81.

Perich, T., Manicavasagar, V., Mitchell, P. B., Ball, J. R., & Hadzi-Pavlovic, D. (2013). A randomized controlled trial of mindfulness-based cognitive therapy for bipolar disorder. *Acta Psychiatrica Scandinavica*, *127*(5), 333-343.

Peters, E., Joseph, S., Day, S., & Garety, P. (2004). Measuring delusional ideation: the 21-item Peters et al. Delusions Inventory (PDI). *Schizophrenia Bulletin, 30,* 1005–1022.

Piccinelli, M., Patterson, M., Braithwaite, I., Boot, D., & Wilkinson, G. (1999). Anxiety and depression disorders 5 years after severe injuries: a prospective follow-up study. *Journal of psychosomatic research*, *46*(5), 455-464.

Powers, W. T. (1973). Feedback: Beyond Behaviorism: Stimulus-response laws are wholly predictable within a control-system model of behavioral organization. *Science*, *179*(4071), 351-356.

Powers, W. T. (2005). *Behavior: The control of perception* (pp. 34-37). New Canaan: Benchmark Publications.

Radford, S. R., Crane, R. S., Eames, C., Gold, E., & Owens, G. W. (2012). The feasibility and effectiveness of mindfulness-based cognitive therapy for mixed diagnosis patients in primary care: a pilot study. *Mental health in family medicine*, *9*(3), 191.

Rapee, R. M., & Heimberg, R. G. (1997). A cognitive-behavioral model of anxiety in social phobia. *Behaviour research and therapy*, *35*(8), 741-756.

Rector, N. A., Man, V., & Lerman, B. (2014). The expanding cognitive-behavioural therapy treatment umbrella for the anxiety disorders: disorder-specific and transdiagnostic approaches. *The Canadian Journal of Psychiatry*, *59*(6), 301-309.

Repper J. & Perkins R. (2003) *Social Inclusion and Recovery: A Model for Mental Health Practice*. Bailliere Tindall, London.

Rethink (2005) *Recovery – A Brief Introduction to the Recovery Approach. Available at:* http://www.rethink.org/recovery

Rodríguez, M. R., Nuevo, R., Chatterji, S., & Ayuso-Mateos, J. L. (2012). Definitions and factors associated with subthreshold depressive conditions: a systematic review. *BMC psychiatry*, *12*(1), 181.

Roy-Byrne, P. (2017). Transdiagnostic cognitive behavioral therapy and the return of the repressed. *JAMA psychiatry*, *74*(9), 867-868.

Salkovskis, P. M. (1989). Cognitive-behavioural factors and the persistence of intrusive thoughts in obsessional problems. *Behaviour research and therapy*, *27*(6), 677-682.

Salkovskis P.M., Rimes K.A., Warwick H.M.C. & Clark D.M. 2002. *The health anxiety inventory: development and validation of scales for the measurement of health anxiety and hypochondriasis. Psychological Medicine*, *32,* 843-853.

Schrank, B., & Slade, M. (2007). Recovery in psychiatry. *Psychiatric. Bulletin,* 31, 321–325. doi: 10.1192/pb.bp.106.013425

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). Mindfulness-based Cognitive Therapy for Depression: A New Approach to Preventing Relapse xiv.

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2012). *Mindfulness-based cognitive therapy for depression*. Guilford Press.

Shafran, R., Clark, D. M., Fairburn, C. G., Arntz, A., Barlow, D. H., Ehlers, A., ... & Salkovskis, P. M. (2009). Mind the gap: Improving the dissemination of CBT. *Behaviour research and therapy*, *47*(11), 902-909.

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of clinical psychology*, *62*(3), 373-386.

Shear, M.K., Brown, T. A., Barlow, D.H., Money, R., Sholomskas, D.E., Woods, S.W., Gorman, J.M. & Papp, L.A. (1997) Multicenter collaborative Panic Disorder Severity Scale. *American Journal of Psychiatry*, *154*, 1571-1575.

Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Janavs, J., Weiller, E., Keskiner, A., ... & Dunbar, G. C. (1997). The validity of the Mini International Neuropsychiatric Interview (MINI) according to the SCID-P and its reliability. *European Psychiatry*, *12*(5), 232-241.

Shonin, E., Van Gordon, W., & Griffiths, M. (2013). Mindfulness-based interventions: Towards mindful clinical integration. *Frontiers in Psychology*, *4*, 194.

Simons, A. D., Garfield, S. L., & Murphy, G. E. (1984). The process of change in cognitive therapy and pharmacotherapy for depression: Changes in mood and cognition. *Archives of General Psychiatry*, *41*(1), 45-51.

Skinner, B. F. (1938). *The behavior of organisms: an experimental analysis*. Appleton-Century. *New York*.

Slade, M, Amering, M, Farkas, M. (2014). Uses and abuses of recovery: Implementing recovery-oriented practices in mental health systems. *World Psychiatry,* 13(1), 12–20.

Smith, A. (2004). Clinical uses of mindfulness training for older people. *Behavioural and Cognitive Psychotherapy*, 32, 423–430.

Snyder, C. R., Lopez, S. J., & Pedrotti, J. T. (2011). *Positive psychology: The scientific and practical explorations of human strengths* (2nd ed.). Thousand Oaks, Calif.: SAGE

Speca, M., Carlson, L.E., Goodey, E. & Angen, M. (2000). A randomized, waitlist-controlled clinical trial: The effect of a mindfulness meditation-based stress reduction program on mood and symptoms of stress in cancer outpatients. *Psychosomatic Medicine*, 62, 613–622.

Spitzer, R.L., Kroenke, K., Williams, J.B.W., & Lowe B. (2006) A brief measure for assessing generalized anxiety disorder. *Archives of Internal Medicine,* 166, 1092-1097.

Stern, R. S., & Drummond, L. M. (1991). *The practice of behavioural and cognitive psychotherapy*. Cambridge University Press.

Strauss, C., Cavanagh, K., Oliver, A., & Pettman, D. (2014). Mindfulness-based interventions for people diagnosed with a current episode of an anxiety or depressive disorder: a meta-analysis of randomised controlled trials. *PLOS one*, *9*(4), e96110.

Swift, J. K., & Greenberg, R. P. (2012). Premature discontinuation in adult psychotherapy: A meta-analysis. *Journal of Consulting and Clinical Psychology, 80*(4), 547-559. http://dx.doi.org/10.1037/a0028226

Tang, T. Z., & DeRubeis, R. J. (1999). Sudden gains and critical sessions in cognitive-behavioral therapy for depression. *Journal of consulting and clinical psychology*, *67*(6), 894.

Teasdale, J. D. (1993). Emotion and two kinds of meaning: Cognitive therapy and applied cognitive science. *Behaviour research and therapy*, *31*(4), 339-354.

Teasdale, J. D. (1999). Emotional processing, three modes of mind and the prevention of relapse in depression. *Behaviour research and therapy*.

Timimi, S. (2014). No more psychiatric labels: Why formal psychiatric diagnostic systems should be abolished. *International Journal of Clinical and Health Psychology*, *14*(3), 208-215.

Trapnell, P. D., & Campbell, J. D. (1999). Private self-consciousness and the five-factor model of personality: distinguishing rumination from reflection. *Journal of personality and social psychology*, *76*(2), 284.

Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive therapy and research*, *27*(3), 247-259.

Turner D. & Frak D. (2001). *Wild Geese: Recovery in National Schizophrenia Fellowship*. Green Gauge Consultancy and N.S.FWales, Powys.

Úbeda-Gómez, J., León-Palacios, M. G., Escudero-Pérez, S., Barros-Albarrán, M. D., López-Jiménez, A. M., & Perona-Garcelán, S. (2015). Relationship between self-focused attention, mindfulness and distress in individuals with auditory verbal hallucinations. *Cognitive neuropsychiatry*, *20*(6), 482-488.

Vandervoort, D. (1999). Quality of social support in mental and physical health. *Current Psychology*, 18 (2), 205-221. https://doi.org/10.1007/s12144-999-1029-8

Van Os, J., Linscott, R. J., Myin-Germeys, I., Delespaul, P., & Krabbendam, L. (2009). A systematic review and meta-analysis of the psychosis continuum: evidence for a psychosis proneness–persistence–impairment model of psychotic disorder. *Psychological medicine*, *39*(2), 179-195.

Van Vugt, M. K., Hitchcock, P., Shahar, B., & Britton, W. (2012). The effects of mindfulness-based cognitive therapy on affective memory recall dynamics in depression: a mechanistic model of rumination. *Frontiers in human neuroscience*, *6*, 257.

Vincent, P. J., Boddana, P., & MacLeod, A. K. (2004). Positive life goals and plans in parasuicide. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *11*(2), 90-99.

Walsh, R., & Roche, L. (1979). Precipitation of acute psychotic episodes by intensive meditation in individuals with a history of schizophrenia. *The American journal of psychiatry*.

Wanden-Berghe, R. G., Sanz-Valero, J., & Wanden-Berghe, C. (2010). The application of mindfulness to eating disorders treatment: a systematic review. *Eating disorders*, *19*(1), 34-48.

Watkins, E. R. (2008). Constructive and unconstructive repetitive thought. *Psychological bulletin*, *134*(2), 163.

Watson, J. B., & Rayner, R. (1920). Conditioned emotional reactions. *Journal of experimental psychology*, *3*(1), 1.

Wearden A.J., Tarrier N., Barrowclough C., Zastowny T.R. & Rahill A.A. (2000). A review of expressed emotion research in health care. *Clinical Psychology Review* 20 (5), 633-666.

Wegner, D. M., & Zanakos, S. (1994). Chronic thought suppression. *Journal of personality*, *62*(4), 615-640.

Weiss, D.S. (2007). The Impact of Event Scale-Revised. In J.P. Wilson, & T.M. Keane (Eds.) *Assessing psychological trauma and PTSD: a practitioner's handbook* (2nd ed., pp. 168-189). New York: Guilford Press.

Wells, A., & Carter, K. E. (2009). Maladaptive thought control strategies in generalized anxiety disorder, major depressive disorder, and nonpatient groups and

relationships with trait anxiety. *International Journal of Cognitive Therapy*, *2*(3), 224-234.

Wells A., Matthews G. (1994). *Attention and Emotion: A Clinical Perspective.* Hove: Erlbaum.

Wells A., Matthews G. (1996). Modelling cognition in emotional disoder: the S-REF model. *Behavior Research and Therapy.* 32 867–870. 10.1016/S0005-7967(96)00050-2

Westbrook, D., & Kirk, J. (2005). The clinical effectiveness of cognitive behaviour therapy: Outcome for a large sample of adults treated in routine practice. *Behaviour Research and Therapy*, *43*(10), 1243-1261.

Williams, J.M., Crane, C., Barnhofer, T., Brennan, K., Duggan, D.S., Fennell, M.J….Russell, I.T. (2014) Mindfulness-based cognitive therapy for preventing relapse in recurrent depression: a randomized dismantling trial. *Journal of Consulting and Clinical Psychology, 82*, 275–86.

Williams, M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2007). *The mindfulness way through depression.* Guilford Press.

Williams, J. M. G. (2008). Mindfulness, depression and modes of mind. *Cognitive Therapy and Research*, *32*(6), 721.

Windle, C. R., Newsome, S., Waldo, M., & Adams, E. M. (2014). Mindfulness and group: Mindfulness-based stress reduction and dialectical behavior therapy. In J. L. DeLucia-Waack, C. R. Kalodner, & M. T. Riva (Eds.), *Handbook of group counseling and psychotherapy* (pp. 474-483). Thousand Oaks, CA, US: Sage Publications, Inc.

Wolpe, J. (1958). Psychotherapy by reciprocal inhibition as the main basis of psychotherapeutic effects. *Archives of Neurology and Psychiatry*, *72*, 205.

World Health Organization. (2014). World health statistics 2014: a wealth of information on global public health. World Health Organization. http://www.who.int/iris/handle/10665/112739

World Health Organization. (2018). *International statistical classification of diseases and related health problems* (11th Revision). Retrieved from https://icd.who.int/browse11/l-m/en

Yalom, I. D. (1995). *The theory and practice of group psychotherapy (4ᵗʰ ed.)*. Basic Books (AZ).

Yalom, I. D., & Rand, K. (1966). Compatibility and cohesiveness in therapy groups. *Archives of General Psychiatry, 15,* 267–277.

Yorston, G. A. (2001). Mania precipitated by meditation: a case report and literature review.

Zhan S, Ottenbacher K, J. (2001) Single subject research designs for disability research. *Disability Rehabilitation*, 23, 1-8.

Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta psychiatrica scandinavica*, *67*(6), 361-370.

7.0. APPENDICES

APPENDIX 1: Search Terms

PSYCHINFO

(mindfulness OR MBCT OR MBSR) AND (group OR intervention OR course) AND ("mental disorder" OR "mental disease" OR "mental illness" OR "psychological distress" OR schizophreni* OR psychotic OR psychosis OR bipolar OR depression OR depressive OR "personality disorder" OR anxiety OR phobi* OR panic OR "post-traumatic stress disorder" OR PTSD or psychiatr* OR "affective disorder") AND (ruminat* OR worry OR attention OR memory OR recurrent OR reasoning OR thinking OR thought OR avoid* OR metacognitive OR behaviour* OR behavior* OR "safety-seeking" OR process* OR control OR flexibility OR transdiagnostic OR mechanism)

SCIENCE DIRECT

tak(mindfulness OR MBCT OR MBSR) AND tak(group OR intervention OR course) AND tak("mental disorder" OR "mental disease" OR "mental illness" OR "psychological distress" OR schizophreni* OR psychotic OR psychosis OR bipolar OR depression OR depressive OR "personality disorder" OR anxiety OR phobi* OR panic OR "post-traumatic stress disorder" OR PTSD or psychiatr* OR "affective disorder") AND tak(ruminat* OR worry OR attention OR memory OR recurrent OR reasoning OR thinking OR thought OR avoid* OR metacognitive OR behaviour* OR behavior* OR "safety-seeking" OR process* OR control OR flexibility OR transdiagnostic OR mechanism)

SCOPUS

TITLE-ABS-KEY (*mindfulness* OR *mbct* OR *mbsr*) AND TITLE-ABS-KEY (*group* OR *intervention* OR *course*) AND TITLE-ABS-KEY (*"mental disorder"* OR *"mental disease"* OR *"mental illness"* OR *"psychological distress"* OR *schizophreni** OR *psychotic* OR *psychosis* OR *bipolar* OR *depression* OR *depressive* OR *"personality disorder"* OR *anxiety* OR *phobi** OR *panic* OR *"post-traumatic stress disorder"* OR *ptsd* OR *psychiatr** OR *"affective disorder"*) AND TITLE-ABS-KEY (*ruminat** OR *worry* OR *attention* OR *memory* OR *recurrent* OR *reasoning* OR *thinking* OR *thought* OR *avoid** OR *metacognitive* OR *behaviour** OR *behavior** OR *"safety-seeking"* OR *process** OR *control* OR *flexibility* OR *transdiagnostic* OR *mechanism*)

PubMed

(((((mindfulness[Text Word] OR MBCT[Text Word] OR MBSR[Text Word])) AND (group[Text Word] OR intervention[Text Word] OR course[Text Word])) AND ("mental disorder"[Text Word] OR "mental disease"[Text Word] OR "mental illness"[Text Word] OR "psychological distress"[Text Word] OR schizophreni*[Text Word] OR psychotic[Text Word] OR psychosis[Text Word] OR bipolar[Text Word] OR depression[Text Word] OR depressive[Text Word] OR "personality disorder"[Text Word] OR anxiety[Text Word] OR phobi*[Text Word] OR panic[Text Word] OR "post-traumatic stress disorder"[Text Word] OR PTSD[Text Word] OR psychiatr*[Text Word] OR "affective disorder"[Text Word])) AND (ruminat*[Text Word] OR worry[Text Word] OR attention[Text Word] OR memory[Text Word] OR recurrent[Text Word] OR reasoning[Text Word] OR thinking[Text Word] OR thought[Text Word] OR avoid*[Text Word] OR metacognitive[Text Word] OR behaviour*[Text Word] OR behavior*[Text Word] OR "safety-seeking"[Text Word] OR process*[Text Word] OR control[Text Word] OR flexibility[Text Word] OR transdiagnostic[Text Word] OR mechanism[Text Word]))

APPENDIX 2: Exclusion Criteria

- Not relevant and excluded based on title;
  - o Meta-analysis or review paper
  - o Not in English
  - o Not adult population
  - o Not a study (commentary/book review)
  - o Not related to mindfulness
  - o Non-clinical population (helathy participants, military population)
  - o Not primary mental health problem (physical problem)
  - o Scale validation study
  - o Mindfulness meditation not the primary component (e.g. ACT, DBT)

- Selected for further review and excluded based on;
  - o Non-intervention study (e.g. correlational study)
  - o Non- group-based intervention (e.g. case study)
  - o Addiction/ gambling study
  - o Older adults
  - o Non-western population
  - o Neurological/physiological outcome
  - o No process based outcome
  - o Dismantling study

- Studies with transdiagnostic outcomes and excluded based on;
  - o Non-UK based studies
  - o Qualitative study

Would you like to take part in an 8-week, Mindfulness Based Cognitive Therapy (MBCT) Group?

What is MBCT?

Mindfulness Based Cognitive Therapy combines cognitive and behavioural techniques with mindfulness meditation practices. The aim of MBCT is to help people understand and manage their thoughts and feelings in a non- judgmental way. Research suggests that mindfulness is beneficial for people seeking help for a wide range of psychological difficulties.

The research…

We would like to invite you to participant in a research study evaluating the role of group MBCT in reducing psychological distress and achieving goals you may have for yourself.

What it involves…

The group will run on a weekly basis for 8 weeks in total, with a reunion session one-month on from the last session. The group session will usually last 2 hours and will involve mindfulness meditation, home-based practices and group discussions, guided by an experienced MBCT facilitator. You may then be invited for a meeting to discuss your experience of the group.

Do I have to take part?

No- taking part in the research is voluntary and you can withdraw from the research and/or group at any point. This will not affect the care you continue to receive from the Primary Care Mental Health Service.

APPENDIX 4: Participant Information Sheet (group)

PARTICIPANT INFORMATION SHEET

Evaluating a Mindfulness-Based Cognitive Therapy Group for Service Users Transitioning out of Secondary Care Services.

Louise Noronha (Trainee Clinical Psychologist);
Email: u1525469@uel.ac.uk ; **Tel**:
Address: Department of Clinical Psychology, University of East London, Water Lane, London E15 4NZ

Thesis supervisor: Dr. Trishna Patel (Email: t.patel@uel.ac.uk; **Tel:)**

I would like to invite you to take part in a research study. This study is part of my Doctoral Degree in Clinical Psychology at the University of East London. Before you decide if you would like to take part or not you need to understand why the research is being done and what it would involve for you. ***Please read through the following information carefully before deciding whether or not you would like to take part***. You can talk to others, including friends and family about the study before making your decision. If something needs clarification or if you have any unanswered questions about the research, please do not hesitate contact myself (Louise Noronha) or my supervisor (Trishna Patel).

What is the purpose of the study?
This study aims to evaluate the role of group Mindfulness-Based Cognitive Therapy (MBCT) in reducing psychological distress and achieving goals that you may have for yourself. The study will ask you to complete a set of questionnaires and may invite you to take part in a one-to-one conversation with the researcher. By evaluating this group, we hope to understand what changes need to be made in the way that practitioners think about psychological difficulties and the interventions that are offered. The main aim is to improve the type of therapies offered by services to clients.

Why have I been invited to take part in this study?
You have been invited to take part in the study as we would like to recruit people with a range of psychological difficulties, who have recently been discharged from secondary mental health care services, to complete an 8-week MBCT group. MBCT has been found to improve wellbeing and reduce distress for a number of people with different mental health diagnoses. The findings of the study will help researchers to understand how MBCT leads to meaningful change in people's lives and will hopefully inform change and improve the types of therapies that are offered to service users in the future.

You are eligible to take part in the study if you are currently under the care of

the XXX Primary Care Mental Health Service, can understand the information sheet provided and are willing to attend the group. The researcher will call you to discuss whether the group is an appropriate intervention for you at this time. If it is felt that now may not be an appropriate time for you to take part, you will be offered another telephone or face-to-face meeting to discuss this decision and we will contact your link worker, who can provide further support.

Do I have to take part?
No. It is entirely up to you. If you do decide to take part, you can withdraw from the group and/or research study at any point without providing a reason for doing so. You can also ask for any information collected from you to be destroyed up to 14 days from the date of the group reunion session, at which point the analysis of the data will be finalised. **If you do decide to withdraw, from either the research or the MBCT group, or both, this will not affect the standard of care you will continue to receive from the service.**

What will I be asked to do if I agree to take part?
You will be asked to attend an 8-week Mindfulness-Based Cognitive Therapy Group led by an experienced MBCT teacher. The group will consist of one 2-hour session per week for 8-weeks and will involve meditation practices and home practices, which you will be asked to complete between sessions. You will also be invited back for a reunion session one month after the end of the group. Unfortunately, it will not be possible to reimburse your travel expenses, however we greatly value and appreciate your participation in this study.

Before each group session you will be asked to complete a set of questionnaires, to which there are no right or wrong answers. The questionnaires will ask about your difficulties and experiences and will take about 10 minutes to complete. You will have the choice of completing these questionnaires electronically and returning them by email, or completing paper copies at the beginning of each group session. If you cannot answer some of the questions, I will be able to help clarify what is being asked of you.

You may also be invited to take part in a one-to-one conversation in person to discuss your experience of the group. This meeting will last approximately 40-60 minutes and will be audio recorded (I will check that you are happy to be audio-recorded on the day). All recorded information will be kept confidential and stored securely (as discussed below).

Are there any disadvantages of taking part?
MBCT has been studied for many years and it is thought that the effects could be beneficial for people who use mental health services as well as those who do not. The group will involve meditation practice, which can sometimes make you more aware of uncomfortable feelings. However, if you feel any discomfort or distress during the group you may leave the room to take a break at any point. If upon completing the questionnaires you experience any discomfort, you will be given the opportunity to talk to the mindfulness teacher at the end of the group or you may contact the researchers to discuss this further. You will also be provided with a list of supporting agencies should you wish to talk to someone outside of the service.

Will the information I provide remain confidential?
Your GP will be informed of your participation in the study, but will not be provided with any other information about your involvement or contribution (i.e. all information provided will be confidential).

All paper questionnaires and forms containing personal identifying information will be kept in a locked filing cabinet in a secure room at the University of East London. They will then be scanned and saved as electronic documents, at which point paper copies will be destroyed. The questionnaires you complete will be given a unique participant code and will be kept separate from any personal identifying information at all times. Any electronic data and documents will be stored on a secure password protected computer file at the University of East London for a maximum of 5 years, at which point the documents will be destroyed. If data files need to be transferred via email, the files will be password protected beforehand or alternatively transferred via a password protected storage device (i.e., USB stick). Only the researcher and her research supervisors will have access to the information you provide.

The mindfulness teacher will have access to an electronic password protected document containing the names and contact numbers of potential participants, which will be destroyed once the last potential participant has been contacted.

Anything discussed in the group will be kept confidential by the mindfulness teacher; group members will be asked to sign a confidentially agreement that they will not share information discussed in the group with anyone outside of that space, even other group members. In certain exceptional circumstances where you or others may be at significant risk of harm, this may need to be reported to an appropriate person within the service, in accordance with the UK Data Protection Act 1998. This would usually be discussed with you first.

What will happen to the results of the research study?
The results of the study will be written up as a Doctoral Thesis, submitted for publication in a psychology journal and disseminated at academic conferences. In all written material produced as a result of this study, your identity will remain anonymous (all identifying information will be removed or replaced with a pseudonym). The data will be stored for a maximum of 5 years, following which all paper files will be shredded and disposed of. Any electronic and audio files will also be destroyed.

Who has reviewed the study?
All research in the NHS is looked at by an independent group of people called a Research Ethics Committee to protect your safety, rights, well-being and dignity. This study has been reviewed and given favorable opinion by the London-Bromley Research Ethics Committee.

Complaints
If you have a concern about any aspect of this study you can contact the researchers on the numbers provided below and we will do our best to answer your questions. If you remain unhappy and wish to complain formally, you can do

this through the NHS Complaints Procedure. Details can be obtained from your link worker or at ().

Who can I contact following the study if I have any questions?
If you have any further questions please do not hesitate to contact me on the above contact details.

Thank you for taking the time to read this information sheet

IRAS ID: 218478

IRAS ID: 218478

PARTICIPANT ID:

<u>CONSENT FORM</u>

Evaluating a Mindfulness-Based Cognitive Therapy Group for Service Users Transitioning out of Secondary Care Services.

Name of Researcher: **Louise Noronha (Trainee Clinical Psychologist);**
Email: <u>u1525469@uel.ac.uk</u> ; **Tel:** (XXX or XXX to leave a message)
Address: Department of Clinical Psychology, University of East London, Water Lane, London E15 4NZ

Thesis supervisor: Dr Trishna Patel (Email: <u>t.patel@uel.ac.uk</u>; Tel:XXX**)**

If you would like to ask any further questions about the study before providing consent, please do not hesitate to ask or contact me using the details provided above. Please read each statement carefully and initial the box beside the statements you agree with.

Please initial:

I confirm that I have read and understood the information sheet for this study and that I have been given a copy to keep.

I have been given the opportunity to ask questions, and am satisfied with the answers I have been given.

I understand that my participation in the Mindfulness Based Cognitive Therapy (MBCT) group and my involvement in the associated research study is voluntary and that I may withdraw at any time if I wish to do so, without giving a reason for my decision. This will not affect the standard of care I continue to receive by the service.

I understand that my GP will be informed of my participation in this study

I understand that I may request information collected for this study be destroyed, up to 14 days from the date of the group reunion session, by which time the data will have been analysed.

I understand that my involvement in this study, and my personal information and data, including recordings from the research will be securely stored and remain strictly confidential. Only the researcher and her supervisors at the University of East London will have access to this information, to which I give my permission.

It has been explained to me what will happen to the data once the research has been completed.

I understand that personal information I disclose in the MBCT group will be kept confidential by the facilitator.

I understand and agree that information shared in the group should not be shared by me with those outside of the group or with other group members outside of the group space.

I fully and freely agree to take part in the research, which has been fully explained to me.

Participant's name (BLOCK CAPITALS):
....

Participant's signature:
...........................………..……

Date:
...........................……………………………………….………..

Investigator's name (BLOCK CAPITALS):
....……….

Investigator's signature:
....……

Date:
...........................……………………………………………………….

APPENDIX 6: Demographic Questionnaire

Version 1.2

Demographic questionnaire

Answers to these questions will help us think about who Mindfulness-Based Cognitive Therapy (MBCT) might be useful for and the reasons why.
This information will be kept confidential and answers will not be linked to your name.

1.   How old are you?_____

2.   What gender do you identify yourself as?_____

3.   What ethnic group do you identify with?_____

4.   Are you currently employed?
       If so, what is your current job role(s)?_____

5.   What psychological problem are you currently experiencing (i.e. which, if any diagnoses have you received)?_____

6.   How long have you have you experienced this problem?_____

7.   How many times have you sought help for this problem? _____

8.   What other psychological problems do you experience (if any)?_____

9.   How satisfied are you with your current living situation?
       (0= "Not at all satisfied", 10= "extremely satisfied")
       0   1   2   3   4   5   6   7   8   9   10

10.   How satisfied are you with the amount of support you receive from friends and family?
       (0= "Not at all satisfied", 10= "extremely satisfied")

       0   1   2   3   4   5   6   7   8   9   10

11.   How satisfied are you with the type of support you receive from friends and family?
       (0= "Not at all satisfied", 10= "extremely satisfied")
       0   1   2   3   4   5   6   7   8   9   10

APPENDIX 7: Goal-based Outcome

Version 1.2

Goal Based Outcome Measure (baseline)

- "What is the main difference you would like to achieve by taking part in the group?

- "How close do you think you are to achieving this?" (0=not at all close", 10= "extremely close")

    0   1   2   3   4   5   6   7   8   9   10

Version 1.2

Goal Based Outcome Measure (week 4 and 8)

- "What is the main difference you would like to achieve by taking part in the group?

- "How close do you think you are to achieving this?" (0=not at all close", 10= "extremely close")

    0   1   2   3   4   5   6   7   8   9   10

- "Have you found the group useful in allowing you to move toward the change you wanted to make?" (Yes/No)

- If yes, "How useful?" (0= "not at all useful", 10= "extremely useful")

    0   1   2   3   4   5   6   7   8   9   10

Goal Based Outcome Measure (follow up)

- "What was the main difference you would have liked to achieve by taking part in the group?

- "How close do you think you are to achieving this?" (0=not at all close", 10= "extremely close")

  0   1   2   3   4   5   6   7   8   9   10

- "Did you found the group useful in allowing you to move toward the change you wanted to make?" (Yes/No)

- If yes, "How useful?" (0= "not at all useful", 10= "extremely useful")

  0   1   2   3   4   5   6   7   8   9   10

APPENDIX 8: Freely Available Symptom-based Measures

Generalised Anxiety Disorder Questionnaire (GAD 7)

Participant Number:_____

Date:_____

Over the last 2 weeks, have you felt bothered by any of these things?	Not at all	Several Days	More than half the days	Nearly Every day
1. Feeling nervous, anxious, or on edge?	0	1	2	3
2. Not being able to stop or control worrying?	0	1	2	3
3. Worrying too much about different things?	0	1	2	3
4. Trouble relaxing?	0	1	2	3
5. Being so restless that it is hard to sit still?	0	1	2	3
6. Becoming easily annoyed or irritable?	0	1	2	3
7. Feeling afraid as if something awful might happen?	0	1	2	3

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of the things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
☐	☐	☐	☐

Spitzer RL, Kroenke K, Williams JBW, Lowe B. A brief measure for assessing generalized anxiety disorder. *Arch Inern Med.* 2006;166:1092-1097. No permission required to reproduce, translate, display or distribute.

Patient Health Questionnaire (PHQ-9)

Participant Number:_____

Date:_____

Over the last 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several Days	More than half the days	Nearly Every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling asleep or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself- or that you are a failure or have let yourself or family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite- being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of the things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
☐	☐	☐	☐

IMPACT OF EVENT SCALE-REVISED (IES-R)

Instructions: The following is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you *during the past 7 days* with respect to the disaster. How much were you distressed or bothered by these difficulties?

		Not at all	A little bit	Moderately	Quite a bit	Extremely
1	Any reminder brought back feelings about it.	0	1	2	3	4
2	I had trouble staying asleep.	0	1	2	3	4
3	Other things kept making me think about it.	0	1	2	3	4
4	I felt irritable and angry.	0	1	2	3	4
5	I avoided letting myself get upset when I thought about it or was reminded of it.	0	1	2	3	4
6	I thought about it when I didn't mean to.	0	1	2	3	4
7	I felt as if it hadn't happened or wasn't real.	0	1	2	3	4
8	I stayed away from reminders about it.	0	1	2	3	4
9	Pictures about it popped into my mind.	0	1	2	3	4
10	I was jumpy and easily startled.	0	1	2	3	4
11	I tried not to think about it.	0	1	2	3	4
12	I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	2	3	4
13	My feelings about it were kind of numb.	0	1	2	3	4
14	I found myself acting or feeling like I was back at that time.	0	1	2	3	4
15	I had trouble falling asleep.	0	1	2	3	4
16	I had waves of strong feelings about it.	0	1	2	3	4
17	I tried to remove it from my memory.	0	1	2	3	4

18	I had trouble concentrating.	0	1	2	3	4
19	Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	0	1	2	3	4
20	I had dreams about it.	0	1	2	3	4
21	I felt watchful and on guard.	0	1	2	3	4
22	I tried not to talk about it.	0	1	2	3	4

Weiss, D.S. (2007). The Impact of Event Scale-Revised. In J.P. Wilson, & T.M. Keane (Eds.) *Assessing psychological trauma and PTSD: a practitioner's handbook* (2nd ed., pp. 168-189). New York: Guilford Press. Full scale available in text. Permission requested.

Fear Questionnaire (FQ)

Participant Number:_____

Date:_____

Choose a number from the scale below to show how much you would avoid each of the situations listed below because of fear or other unpleasant feelings. Then write the number you choose in the space opposite each situation

0	1	2	3	4	5	6	7	8
would not avoid it		slightly avoid it		definitely avoid it		markedly avoid it		always avoid it
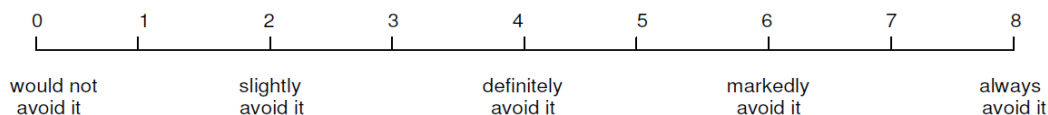
1. Main phobia you want treated (describe_____………
_____

2. Injections or minor surgery………………………………………………….
_____

3. Eating or drinking with other people…………………………………………..
_____

4. Hospitals……………………………………………………………………..
_____

5. Traveling alone or by bus……………………………………………………
_____

6. Walking alone in busy streets………………………………. ……………
_____

7. Being watched or stared at……………………………………….…………..
_____

8. Going into crowded shops……………………………………… …………
_____

9. Talking to people in authority…………………………………….……………..
_____

10. Sight of blood…………………………………………………………………
_____

11. Being criticized…………………………………………………………………
_____

12. Going alone far from home…………………………………………………..
_____

13. Thought of injury or illness……………………………………………..……
_____

14. Speaking or acting to an audience……………………………………………
_____

15. Large open spaces……………………………………………………………
_____

16. Going to the dentist……………………………………………………………
_____

17. Other situations (describe_____)……………………………
_____

18. How would you rate the present state of your phobic symptoms on the scale below?
Please circle one number between 0 and 8.

0	1	2	3	4	5	6	7	8
no phobias present		slightly disturbing/not really disabling		definitely disturbing/ disabling		markedly disturbing/ disabling		very severely disturbing/ disabling
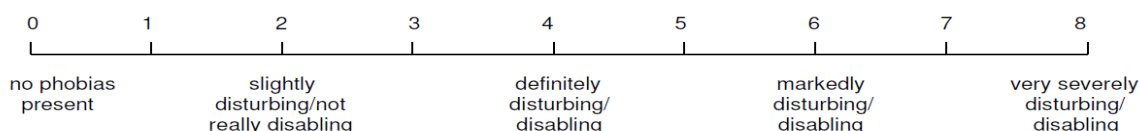
Now choose a number from the scale below to show how much you are troubled by each problem listed, and write the number in the space opposite.

```
     0        1        2        3        4        5        6        7        8
     |--------|--------|--------|--------|--------|--------|--------|--------|
  hardly            slightly          definitely         markedly        very severely
  at all          troublesome        troublesome       troublesome       troublesome
```
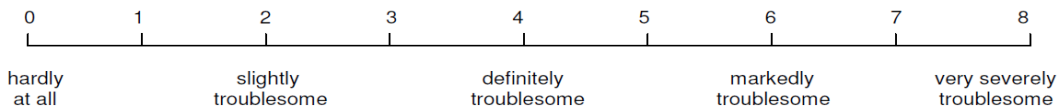
19. Feeling miserable or depressed…..………………………………………………....
_____

20. Feeling irritable or angry…………………………………………………….....….
_____

21. Feeling tense or panicky…………………………………………………………....
_____

22. Upsetting thoughts coming into your head………………………………………..
_____

23. Feeling you or your surroundings are strange or unreal……………………..……
_____

24. Other feelings (describe_____)………..….
_____

OCI-R

The following statements refer to experiences that many people have in their everyday lives.

Circle the number that best describes **HOW MUCH** that experience has **DISTRESSED or BOTHERED you during the PAST MONTH**. The numbers refer to the following verbal labels:

0 = Not at all	3 = A lot
1 = A little	4 = Extremely
2 = Moderately	

1. I have saved up so many things that they get in the way.　　0　1　2　3　4

2. I check things more often than necessary.　　0　1　2　3　4

3. I get upset if objects are not arranged properly.　　0　1　2　3　4

4. I feel compelled to count while I am doing things.　　0　1　2　3　4

5. I find it difficult to touch an object when I know it has been touched by strangers or certain people.　　0　1　2　3　4

6. I find it difficult to control my own thoughts.　　0　1　2　3　4

7. I collect things I don't need.　　0　1　2　3　4

8. I repeatedly check doors, windows, drawers, etc.　　0　1　2　3　4

9. I get upset if others change the way I have arranged things.　　0　1　2　3　4

10. I feel I have to repeat certain numbers.　　0　1　2　3　4

11. I sometimes have to wash or clean myself simply because I feel contaminated.　　0　1　2　3　4

12. I am upset by unpleasant thoughts that come into my mind against my will.　　0　1　2　3　4

13. I avoid throwing things away because I am afraid I might need them later.　　0　1　2　3　4

14. I repeatedly check gas and water taps and light switches after turning them off.　　0　1　2　3　4

15. I need things to be arranged in a particular order.　　0　1　2　3　4

16. I feel that there are good and bad numbers.　　0　1　2　3　4

17. I wash my hands more often and longer than necessary.　　0　1　2　3　4

18. I frequently get nasty thoughts and have difficulty in getting rid of them.　　0　1　2　3　4

Foa, E.B., Huppert, J.D., Leiberg, S. Langner, R., Kichic, R., Hajcak, G., and Salkovskis, P.M. (2002). The obsessive–compulsive inventory: Development and validation of a short version. *Psychological Assessment, 14*, 485-496. The survey can be used for research.

The Mobility Inventory (MI)

Please indicate the degree to which you avoid the following places or situations because of discomfort or anxiety. Rate your amount of avoidance when you are with a trusted companion and when you are alone. Do this by using the following scale.

1. Never avoid
2. Rarely avoid
3. Avoid about half the time
4. Avoid most of the time
5. Always avoid

(You may use numbers half-way between those listed when you think it is appropriate. For example, 3 ½ or 4 ½). Write your score in the blanks for each situation or place under both conditions: when accompanied, and, when alone. Leave blank those situations that do not apply to you.

Place	When accompanied	When alone
Theatres	_____	_____
Supermarkets	_____	_____
Classrooms	_____	_____
Department stores	_____	_____
Restaurants...	_____	_____
Museums...	_____	_____
Elevators/Lifts	_____	_____
Auditoriums or stadiums	_____	_____
Car parks	_____	_____
High places	_____	_____
Tell how high		
Enclosed spaces (e.g. tunnels)	_____	_____
Open spaces:		
(A) Outside (e.g. fields, wide streets, courtyards)	_____	_____
(B) Inside (e.g. large rooms, lobbies)	_____	_____
RIDING IN:		
Buses	_____	_____
Trains	_____	_____
Underground/Tubes	_____	_____
Airplanes	_____	_____
Boats	_____	_____
Driving or riding in a car:		
(A) At any time	_____	_____
(B) On motorways	_____	_____
SITUATIONS:		
Standing in lines	_____	_____
Crossing bridges	_____	_____
Parties or social gatherings	_____	_____
Walking on the street	_____	_____
Staying at home alone	X	_____
Being far away from home	_____	_____
Other (specify)	_____	_____

Chambless DL, Caputo GC, Jasin SE, Gracely EJ, Williams C. The Mobility Inventory for Agoraphobia. Behavior Research and Therapy 23:35-44, 1985. Permission has been granted to reproduce for clinicians to use in their practice and for researchers to use in non-industry studies.

SHORT HEALTH ANXIETY INVENTORY (SHAI)

Each question is this section consists of a group of four statements. Please read each group of statements carefully and then select the one which best describes your feelings, OVER THE PAST WEEK. **Identify the statement by ringing the letter next to it i.e. if you think that statement (a) is correct, ring statement (a); it may be that more than one statement applies, in which case, please ring any/all that are applicable.**

1.   a.   I do not worry about my health.
       b.   I occasionally worry about my health.
       c.   I spend much of my time worrying about my health.
       d.   I spend most of my time worrying about my health.

2.   a   I notice aches/pains less than most other people (of my age).
       b.   I notice aches/pains as much as most other people (of my age).
       c.   I notice aches/pains more than most other people (of my age).
       d.   I am aware of aches/pains in my body all the time.

3.   a.   As a rule I am not aware of bodily sensations or changes.
       b.   Sometimes I am aware of bodily sensations or changes.
       c.   I am often aware of bodily sensations or changes.
       d.   I am constantly aware of bodily sensations or changes.

4.   a.   Resisting thoughts of illness is never a problem.
       b.   Most of the time I can resist thoughts of illness.
       c.   I try to resist thoughts of illness but am often unable to do so.
       d.   Thoughts of illness are so strong that I no longer even try to resist them.

5.   a.   As a rule I am not afraid that I have a serious illness.
       b.   I am sometimes afraid that I have a serious illness.
       c.   I am often afraid that I have a serious illness.
       d.   I am always afraid that I have a serious illness.

6.   a.   I do not have images (mental pictures) of myself being ill.
       b.   I occasionally have images of myself being ill.
       c.   I frequently have images of myself being ill.
       d.   I constantly have images of myself being ill.

7.   a.   I do not have any difficulty taking my mind off thoughts about my health.
       b.   I sometimes have difficulty taking my mind off thoughts about my health.
       c.   I often have difficulty in taking my mind off thoughts about my health.
       d.   Nothing can take my mind off thoughts about my health.

8.   a.   I am lastingly relieved if my doctor tells me there is nothing wrong.
       b.   I am initially relieved but the worries sometimes return later.
       c.   I am initially relieved but the worries always return later.
       d.   I am not relieved if my doctor tells me there is nothing wrong.

9.   a.   If I hear about an illness I never think I have it myself.
       b.   If I hear about an illness I sometimes think I have it myself.
       c.   If I hear about an illness I often think I have it myself.
       d.   If I hear about an illness I always think I have it myself.

10.   a.   If I have a bodily sensation or change I rarely wonder what it means.
       b.   If I have a bodily sensation or change I often wonder what it means.
       c.   If I have a bodily sensation or change I always wonder what it means.

d.   If I have a bodily sensation or change I must know what it means.

11.   a.   I usually feel at very low risk of developing a serious illness.
        b.   I usually feel at fairly low risk of developing a serious illness.
        c.   I usually feel at moderate risk of developing a serious illness.
        d.   I usually feel at high risk of developing a serious illness.

12.   a.   I never think I have a serious illness.
        b.   I sometimes think I have a serious illness.
        c.   I often think I have a serious illness.
        d.   I usually think that I am seriously ill.

13.   a.   If I notice an unexplained bodily sensation I don't find it difficult to think about other things.
        b.   If I notice an unexplained bodily sensation I sometimes find it difficult to think about other things.
        c.   If I notice an unexplained bodily sensation I often find it difficult to think about other things.
        d.   If I notice an unexplained bodily sensation I always find it difficult to think about other things.

14.   a.   My family/friends would say I do not worry enough about my health.
        b.   My family/friends would say I have a normal attitude to my health.
        c.   My family/friends would say I worry too much about my health.
        d.   My family/friends would say I am a hypochondriac.

Salkovskis P.M., Rimes K.A., Warwick H.M.C. & Clark D.M. 2002. *The health anxiety inventory: development and validation of scales for the measurement of health anxiety and hypochondriasis* Psychological Medicine 2002;32:843-853. Available online, however permission to use also requested from authors.

Panic Disorder Severity Scale – Self Report Form

Several of the following questions refer to panic attacks and limited symptom attacks. For this questionnaire we define a panic attack as a sudden rush of fear or discomfort accompanied by at least 4 of the symptoms listed below. In order to qualify as a sudden rush, the symptoms must peak within 10 minutes. Episodes like panic attacks but having fewer than 4 of the listed symptoms are called limited symptom attacks. Here are the symptoms to count:

- Rapid or pounding heartbeat
- Sweating
- Trembling or shaking
- Breathlessness
- Feeling of choking

- Chest pain or discomfort
- Nausea
- Dizziness or faintness
- Feelings of unreality
- Numbness or tingling

- Chills or hot flushes
- Fear of losing control or going crazy
- Fear of dying

1. How many panic and limited symptoms attacks did you have during the week?

   0   No panic or limited symptom episodes
   1   Mild: no full panic attacks and no more than 1 limited symptom attack/day
   2   Moderate: 1 or 2 full panic attacks and/or multiple limited symptom attacks/day
   3   Severe: more than 2 full attacks but not more than 1/day on average
   4   Extreme: full panic attacks occurred more than once a day, more days than not

2. If you had any panic attacks during the past week, how distressing (uncomfortable, frightening) were they while they were happening? (If you had more than one, give an average rating. If you didn't have any panic attacks but did have limited symptom attacks, answer for the limited symptom attacks.)

   0   Not at all distressing, or no panic or limited symptom attacks during the past week
   1   Mildly distressing (not too intense)
   2   Moderately distressing (intense, but still manageable)
   3   Severely distressing (very intense)
   4   Extremely distressing (extreme distress during all attacks)

3. During the past week, how much have you worried or felt anxious about when your next panic attack would occur or about fears related to the attacks (for example, that they could mean you have physical or mental health problems or could cause you social embarrassment)?

   0   Not at all
   1   Occasionally or only mildly
   2   Frequently or moderately
   3   Very often or to a very disturbing degree
   4   Nearly constantly and to a disabling extent

4. During the past week were there any places or situations (e.g., public transportation, movie theaters, crowds, bridges, tunnels, shopping malls, being alone) you avoided, or felt afraid of (uncomfortable in, wanted to avoid or leave), because of fear of having a panic attack? Are there any other situations that you would have avoided or been afraid of if they had come up during the week, for the same reason? If yes to either question, please rate your level of fear and avoidance this past week

   0   None: no fear or avoidance
   1   Mild: occasional fear and/or avoidance but I could usually confront or endure the situation. There was little or no modification of my lifestyle due to this.
   2   Moderate: noticeable fear and/or avoidance but still manageable. I avoided some situations, but I could confront them with a companion. There was some

modification of my lifestyle because of this, but my overall functioning was not impaired.

    3   Severe: extensive avoidance. Substantial modification of my lifestyle was required to accommodate the avoidance making it difficult to manage usual activities.

    4   Extreme: pervasive disabling fear and/or avoidance. Extensive modification in my lifestyle was required such that important tasks were not performed

5.   During the past week, were there any activities (e.g., physical exertion, sexual relations, taking a hot shower or bath, drinking coffee, watching an exciting or scary movie) that you avoided, or felt afraid of (uncomfortable doing, wanted to avoid or stop), because they caused physical sensations like those you feel during panic attacks or that you were afraid might trigger a panic attack? Are there any other activities that you would have avoided or been afraid of if they had come up during the week for that reason? If yes to either question, please rate your level of fear and avoidance of those activities this past week.

    0   No fear or avoidance of situations or activities because of distressing physical sensations

    1   Mild: occasional fear and/or avoidance, but usually I could confront or endure with little distress activities that cause physical sensations. There was little modification of my lifestyle due to this.

    2   Moderate: noticeable avoidance but still manageable. There was definite, but limited, modification of my lifestyle such that my overall functioning was not impaired.

    3   Severe: extensive avoidance. There was substantial modification of my lifestyle or interference in my functioning.

    4   Extreme: pervasive and disabling avoidance. There was extensive modification in my lifestyle due to this such that important tasks or activities were not performed.

6.   During the past week, how much did the above symptoms altogether (panic and limited symptom attacks, worry about attacks, and fear of situations and activities because of attacks) interfere with your ability to work or carry out your responsibilities at home? (If your work or home responsibilities were less than usual this past week, answer how you think you would have done if the responsibilities had been usual.)

    0   No interference with work or home responsibilities

    1   Slight interference with work or home responsibilities, but I could do nearly everything I could if I didn't have these problems.

    2   Significant interference with work or home responsibilities, but I still could manage to do the things I needed to do.

    3   Substantial impairment in work or home responsibilities; there were many important things I couldn't do because of these problems.

    4   Extreme, incapacitating impairment such that I was essentially unable to manage any work or home responsibilities.

7.   During the past week, how much did panic and limited symptom attacks, worry about attacks and fear of situations and activities because of attacks interfere with your social life? (If you didn't have many opportunities to socialize this past week, answer how you think you would have done if you did have opportunities.)

    0   No interference

    1   Slight interference with social activities, but I could do nearly everything I could if I didn't have these problems.

    2   Significant interference with social activities but I could manage to do most things if I made the effort.

    3   Substantial impairment in social activities; there are many social things I couldn't do because of these problems.

    4   Extreme, incapacitating impairment, such that there was hardly anything social I could do.

Eating Attitudes Test (EAT-26)

The following screening questionnaire is designed to help you determine if your eating behaviors and attitudes warrant further evaluation. The questionnaire is **not intended to provide a diagnosis**. Rather, it identifies the presence of symptoms that are consistent with either a possible eating disorder.

Please mark a check to the right of each of the following statements:	Always Usually Often Sometimes Rarely Never	Score
1. Am terrified about being overweight.		
2. Avoid eating when I am hungry.		
3. Find myself preoccupied with food.		
4. Have gone on eating binges where I feel that I may not be able to stop.		
5. Cut my food into small pieces.		
6. Aware of the calorie content of foods that I eat.		
7. Particularly avoid food with a high carbohydrate		
8. Feel that others would prefer if I ate more.		
9. Vomit after I have eaten.		
10. Feel extremely guilty after eating.		
11. Am preoccupied with a desire to be thinner.		
12. Think about burning up calories when I exercise.		
13. Other people think that I am too thin.		
14. Am preoccupied with the thought of having fat on my body.		
15. Take longer than others to eat my meals.		
16. Avoid foods with sugar in them.		
17. Eat diet foods.		
18. Feel that food controls my life.		
19. Display self-control around food.		
20. Feel that others pressure me to eat.		
21. Give too much time and thought to food.		
22. Feel uncomfortable after eating sweets.		
23. Engage in dieting behavior.		
24. Like my stomach to be empty.		
25. Have the impulse to vomit after meals.		
26. Enjoy trying new rich foods.		
Total Score=		

1) Have you gone on eating binges where you feel that you may not be able to stop? (Eating much more than most people would eat under the same circumstances)   ____ No   ____   Yes

How many times in the last 6 months? _____

2) Have you ever made yourself sick (vomited) to control your weight or shape? ____ No ____ Yes

How many times in the last 6 months? _____

3) Have you ever used laxatives, diet pills or diuretics (water pills) to control your weight or shape? _ No _ Yes How many times in the last 6 months? _____

4) Have you ever been treated for an eating disorder? _ No _ Yes When? _____

The EAT-26 has been reproduced with permission. Garner et al. (1982). The Eating Attitudes Test: Psychometric features and clinical correlates. Psychological Medicine, 12, 871-878.

APPENDIX 9: Interview Schedule

Version 1.2

Interview schedule: participants who found the group helpful

[Before turning on the recorder]
- Sign consent for recording
- Go over areas to cover and explain there is no wrong answer

[Turn on the recorder]

KEEP SPOTLIGHT ON EXPERIENTIAL ASPECTS.

1. **How did you experience the group?** - what was it like

2. **What changes did you notice in your life as a result of being in the group? How has the group helped you move toward the things you value in life?**

   - *When did you realise this had changed? Did you realise this was changing at the time/ did it happen after. What did it feel like/ how did you experience, what did it look like(e.g. imagery)/ where was it.*

3. **Were they changes that you had anticipated?** How aware were you of these taking place, were they what you had anticipated/ any that were surprising?

4. **What was it about the group that allowed me to do this/ what allowed you to do x so much. What aspects of the group did you find particularly helpful?**
   - How would you define useful?- is it about being in a group (interaction), the facilitator, content, process?

5. **Any other things in your life that might have influenced this?**

6. **What aspects were unhelpful or would have liked to be diff, in what way,** how might that have improved your experience

7. **How might we change the way we deliver the group to make it more useful for you?**

8. (How would you describe your experience of awareness during or as a result of the group?)

Prompts: Tell me more. What do you mean? What was that like? How did you feel? What do you think about that? Can you give me an example? Can you describe that?

Debriefing: How do you feel about our conversation today? Is there anything that bothered you? Do you have any questions?

APPENDIX 10: Participant Information Sheet (interviews)

IRAS ID: 218478

PARTICIPANT ID:

<u>PARTICIPANT INFORMATION SHEET- INDIVIDUAL MEETINGS</u>

Evaluating a Mindfulness-Based Cognitive Therapy Group for Service Users Transitioning out of Secondary Care Services.

Individual Meetings

Researcher: Louise Noronha (Trainee Clinical Psychologist);
Email: u1525469@uel.ac.uk ; **Tel:** (to leave a message)
Address: Department of Clinical Psychology, University of East London, Water Lane, London E15 4NZ

Thesis supervisor: Dr. Trishna Patel (email: t.patel@uel.ac.uk; **Tel:)**

Thank you for participating in the Mindfulness Based Cognitive Therapy group. I would now like to invite you to participate in the second phase of the study. Before you decide if you would like to take part or not you need to understand why this part of the research is being done and what it would involve for you. ***Please read through the following information carefully before deciding whether or not you would like to take part***. You can talk to others, including friends and family about the study before making your decision. If something needs clarification or if you have any unanswered questions about the research, please do not hesitate contact myself (Louise Noronha) or my supervisor (Trishna Patel).

What is the purpose of the individual meeting?
The interview aims to understand your experience of the MBCT group. The information you provide will allow us to identify aspects of the group that might be more or less helpful in moving towards your goals and understand how the group could be improved in the future. Your contribution will help us to think about how psychological interventions such as MBCT help people to achieve meaningful change and will further our understanding of the types of interventions that services could use to best achieve this.

Why have I been invited to take part in the meeting?
You have been invited to take part in this second phase as you have identified that you have either found the group helpful or unhelpful in moving towards your goals and we would like to hear more about this. Whether or not you thought the group was useful, we would very much value your perspective.

Do I have to take part?

<u>No.</u> It is entirely up to you. If you do decide to take part, you can withdraw from the study at any point without providing a reason for doing so. You can also ask for any information collected from you to be destroyed up to 14 days from the date of your interview, at which point the analysis of the data will be finalised. **If you do decide to withdraw, from either the research or the MBCT group, or both, this will not affect the standard of care you will continue to receive from the service.**

What will I be asked to do if I agree to take part?

You will be asked to attend a one-to-one meeting with me to discuss your experience of the group. The conversation will last approximately 40-60 minutes and will be audio recorded (I will check that you are happy to be audio-recorded on the day of the meeting). All recorded information will be kept confidential and stored securely (as discussed below). Unfortunately, it will not be possible to reimburse your travel expenses, however to show appreciation for your participation in the individual meeting we will offer you a £10 "Love2shop" voucher.

Will the information I provide remain confidential?

Your GP will be informed of your participation in the study, but will not be provided with any other information about your involvement or contribution (i.e. all information provided will be confidential).

The audio recordings of our conversation will be transferred onto a password protected storage device (i.e. USB stick) and uploaded onto a secure password protected computer file at the University of East London. If data files need to be transferred via email, the files will be password protected beforehand. Only the researcher and her supervisor will have access to the audio recordings you provide. Signed consent forms will be stored separately to audio recordings, so that no identifying information can be matched.

The audio recordings will be transcribed (typed up) into Word documents at which point they will be deleted. The transcribed interviews will be kept for a maximum of 5 years on a secure password protected computer file. The transcripts of your interview will not contain any identifiable information and your name will be replaced with a pseudonym where necessary to protect your identity. The transcripts will be analysed for any themes that might help us understand participants experiences of the group. Selected quotes from your interview may be used in the final report, but will be sufficiently brief to prevent you from being identified as a result of their inclusion.

In certain exceptional circumstances where you or others may be at significant risk of harm, this may need to be reported to an appropriate person within the service, in accordance with the UK Data Protection Act 1998. This would usually be discussed with you first.

Are there any disadvantages of taking part?

During the conversation, you will be asked to discuss your experience of the

group, which may bring up difficult thoughts or emotions for you. You have the right not to answer questions that you do not wish to and will have the opportunity to discuss any difficult feelings that emerge at the end of the individual meeting You will also be provided with a list of supporting agencies should you feel you would like to talk to someone after the study has been completed.

What will happen to the results of the research study?
The results of the study will be written up as a Doctoral Thesis and submitted for publication in a psychology journal and disseminated at academic conferences. In all written material produced as a result of this study, your identity will remain anonymous (all identifying information will be removed or replaced with a pseudonym). The data will be stored for a maximum of 5 years following which all paper files will be shredded and disposed of. Any electronic and audio files will also be destroyed.

Who has reviewed the study?
All research in the NHS is looked at by an independent group of people called a Research Ethics Committee to protect your safety, rights, well-being and dignity. This study has been reviewed and given favorable opinion by the London-Bromley Research Ethics Committee.

Complaints
If you have a concern about any aspect of this study you can contact the researchers on the numbers provided below and we will do our best to answer your questions. If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure. Details can be obtained from your link worker or at ().

Who can I contact following the study if I have any questions?
If you have any further questions please do not hesitate to contact me on the above contact details.

Thank you for taking the time to read this information sheet

IRAS ID: 218478

APPENDIX 11: Consent Form (interviews)

IRAS ID: 218478

PARTICIPANT ID:

<u>CONSENT FORM</u>

Evaluating a Mindfulness-Based Cognitive Therapy Group for Service Users Transitioning out of Secondary Care Services
Individual Meetings

Name of Researcher: **Louise Noronha (Trainee Clinical Psychologist);**
Email: u1525469@uel.ac.uk ; **Tel:** (to leave a message);
Address: Department of Clinical Psychology, University of East London, Water Lane, London E15 4NZ

Thesis supervisor: Dr Trishna Patel (Email: t.patel@uel.ac.uk; Tel:**)**

If you would like to ask any further questions about the study before providing consent, please do not hesitate to ask or contact me using the details provided above. Please read each statement carefully and initial the box beside the statements you agree with.

Please initial:

I confirm that I have read and understood the information sheet about the study and that I have been given a copy to keep.

I have been given the opportunity to ask questions, and am satisfied with the answers I have been given.

I understand that my participation in this individual meeting is voluntary and that I may withdraw at any time if I wish to do so, without giving a reason for my decision. This will not affect the standard of care I continue to receive by the service.

I understand that my GP will be informed of my participation in this study

I give permission for my conversation with the researcher to be audio recorded.

I understand that I may request information collected for this study be destroyed up to 14 days from the date of my individual meeting, by which time the data will have been analysed.

I understand that my personal information and data, including recordings from the research will be securely stored and remain strictly confidential. Only the researcher and her supervisors at the University of East London will have access to this information, to which I give my permission.

It has been explained to me what will happen to the data once the research has been completed.

I understand that personal information I disclose in the meeting will be kept confidential by the researcher and her supervisors.

I fully and freely agree to take part in the research, which has been fully explained to me.

Participant's name (BLOCK CAPITALS):
....

Participant's signature:
...........................………...

Date: ....………………………………

Investigator's name (BLOCK CAPITALS):
....………………………..
Investigator's signature:
....

Date: ....………………………………

APPENDIX 12: Initial Thematic Maps

Version 1.

Myself in relation to others

Accumulation

Not feeling alone — The Experience of Others

Being bound by distress — The repetitiveness

The importance of the facilitator

Like a Weight

Fast/slow

Taking Back Control

A new perspective

The Rate of Change — Stepped

Doing things differently

Takes effort

Doing it myself
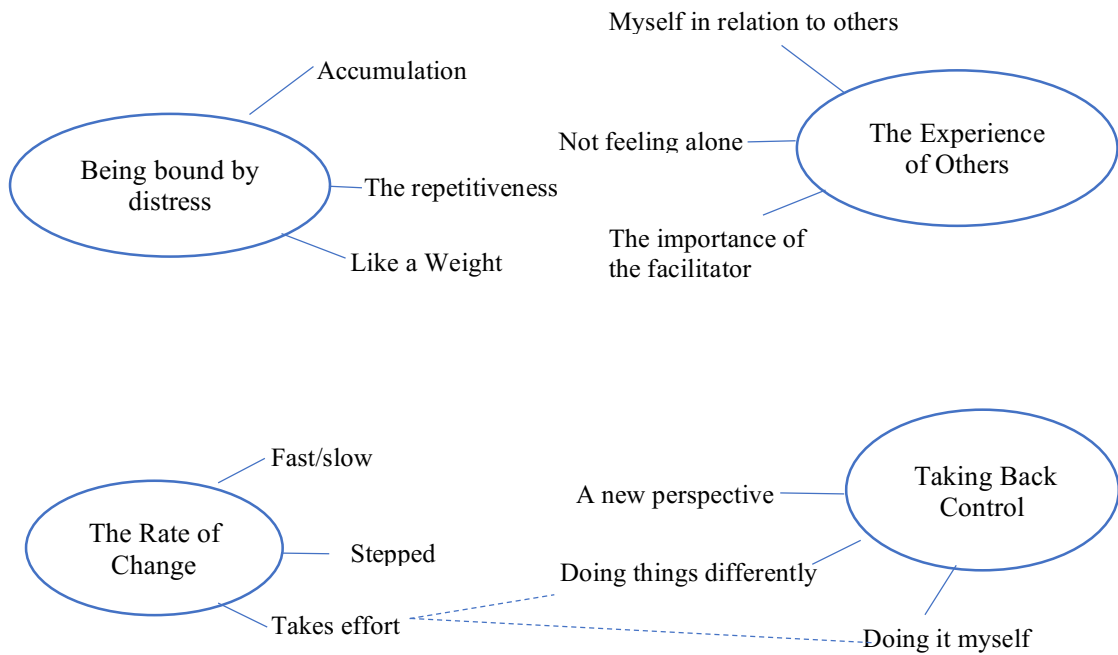
Version 2. Relabeling and Refining

Being bound by distress

Stuckness   Thoughts carried away

Managing in the Moment

Taking Back Control — New perspectives

Doing/ being different

The experience of others

Change as a journey

Events outside of the group — Being in a Group

Helpful and unhelpful elements
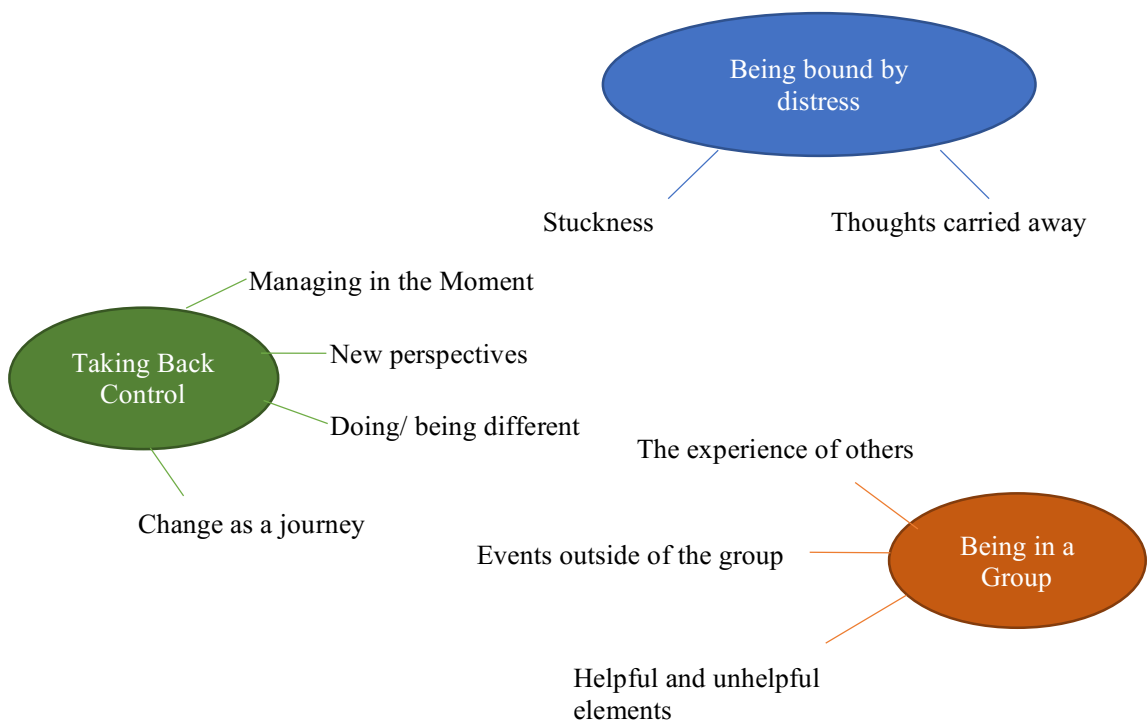
APPENDIX 13: REC, HRA and UEL Approval

NHS
Health Research Authority

Please note: This is the
favourable opinion of the
REC only and does not allow
you to start your study at NHS
sites in England until you
receive HRA Approval

04 October 2017

Miss Louise Noronha
Trainee Clinical Psychologist
Camden and Islington NHS Foundation Trust/ The University of East London
School of Psychology, University of East London
Water Lane
London
E15 4LZ

Dear Miss Noronha

Study title:	**Evaluating a Transdiagnostic Mindfulness-Based Cognitive Therapy (tMBCT) Group for Service Users Transitioning out of Secondary Mental Health Care Services.**
REC reference:	**17/LO/1357**
IRAS project ID:	**218478**

Thank you for your letter of 19 September, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to make a request to postpone publication, please contact hra.studyregistration@nhs.net outlining the reasons for your request.

A Research Ethics Committee established by the Health Research Authority

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Conditions of the favourable opinion

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for NHS permission for research is available in the Integrated Research Application System, www.hra.nhs.uk or at http://www.rdforum.nhs.uk.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations

Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database within 6 weeks of recruitment of the first participant (for medical device studies, within the timeline determined by the current registration and publication trees).

There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

To ensure transparency in research, we strongly recommend that all research is registered but for non-clinical trials this is not currently mandatory.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact hra.studyregistration@nhs.net. The expectation is that all clinical trials will be registered, however, in exceptional circumstances non registration may be permissible with prior agreement from the HRA. Guidance on where to register is provided on the HRA website.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Ethical review of research sites

NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Non-NHS sites

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Copies of advertisement materials for research participants [APPENDIX F- Group Leaflet]	1.2	28 June 2017
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [UEL Indemnity Policy]	1	11 May 2016
GP/consultant information sheets or letters [APPENDIX L- GP Letter v1.1]	1.1	24 August 2017
Interview schedules or topic guides for participants [APPENDIX E- interview schedules]	1.2	20 June 2017
Interview schedules or topic guides for participants [APPENDIX K - Confidentiality Agreement]	1.2	26 June 2017
Interview schedules or topic guides for participants [APPENDIX M Local Support Services]	1.1	28 June 2017
IRAS Application Form [IRAS_Form_20072017]		20 July 2017
IRAS Checklist XML [Checklist_19092017]		19 September 2017
Letter from sponsor [Proceed Letter UEL]	1	11 January 2017
Non-validated questionnaire [APPENDIX B non-validated questionnaire: goal-based outcome]	1.2	
Non-validated questionnaire [APPENDIX A non-validated questionnaire: demographic]	1.2	
Other [Response to Provisional Opinion Letter]	1.2	19 September 2017
Participant consent form [APPENDIX I Participant Consent From-group]	1.3	20 June 2017
Participant consent form [APPENDIX I Participant Consent From-group]	2.2	19 September 2017
Participant consent form [APPENDIX J Participant Consent From-interviews]	2.2	19 September 2017
Participant information sheet (PIS) [APPENDIX G Participant Information Sheet- group]	2.2	19 September 2017
Participant information sheet (PIS) [APPENDIX H Participant Information Sheet- interviews]	2.2	19 September 2017
Referee's report or other scientific critique report [Review of Proposed Research/ feedback]	1	11 January 2017

Research protocol or project proposal [Research Protocol]	1.4	29 June 2017
Summary CV for Chief Investigator (CI) [C.V. Chief Investigator L.N.]	1	01 June 2017
Summary CV for student [Chief Investigator/ student C.V.]	1	01 June 2017
Summary CV for supervisor (student research) [Academic Supervisor C.V. T.P.]	1	29 June 2017
Validated questionnaire [APPENDIX C & D - Validated Questionnaires]	1.3	28 June 2017

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The HRA website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website:
http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/

HRA Training

We are pleased to welcome researchers and R&D staff at our training days – see details at
http://www.hra.nhs.uk/hra-training/

17/LO/1357	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project.

Yours sincerely

Miss Louise Noronha
Trainee Clinical Psychologist
Camden and Islington NHS Foundation Trust/ The University
of East London
School of Psychology, University of East London
Water Lane
London
E15 4LZ

10 October 2017

Dear Miss Noronha

Letter of HRA Approval

Study title:	**Evaluating a Transdiagnostic Mindfulness-Based Cognitive Therapy (tMBCT) Group for Service Users Transitioning out of Secondary Mental Health Care Services.**
IRAS project ID:	**218478**
REC reference:	**17/LO/1357**
Sponsor	**The University of East London**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Page **1** of **8**

12th October 2017

Dear Louise,

Project Title:	Evaluating a Transdiagnostic Mindfulness-Based Cognitive Therapy (tMBCT) Group for Service Users Transitioning out of Secondary Mental Health Care Services
Researcher(s):	Louise Noronha
Principal Investigator:	Louise Noronha

I am writing to confirm that the application for the aforementioned NHS research study reference **17/LO/1357** has received UREC ethical approval and is sponsored by the University of East London.

The lapse date for ethical approval for this study is **12th October 2021**. If you require UREC approval beyond this date you must submit satisfactory evidence from the NHS confirming that your study has current NHS R&D ethical approval and provide a reason why UREC approval should be extended.

Please note as a condition of your sponsorship by the University of East London your research must be conducted in accordance with NHS regulations and any requirements specified as part of your NHS R&D ethical approval.

Please confirm that you will conduct your study in accordance with the consent given by the Trust Research Ethics Committee by emailing researchethics@uel.ac.uk.

Please ensure you retain this approval letter, as in the future you may be asked to provide proof of ethical approval.

With the Committee's best wishes for the success of this project.

APPENDIX 14: Raw Scores

Participant 1	Session								
	B/L	2	3	4	5	6	7	8	Fu
Process-Based									
RoC scale	31.81	42.73	49.09	59.09				54.55	
AAQ-II	49	49	49	49				49	49
CBP-Q	90	110	93	102				103	97
FFMQ	33	33	35	30				31	33
Symptom Based									
Depression	27	26	23	23				26	27
GAD	20			21				21	21
PTSD	77			81				78	83
Goal-Based									
Closeness	4	3	4	4				5	5
Usefulness of group		7		7				8	8
Satisfaction									
Living Situation	2			9				9	8
Amount support	4			8				5	8
Type support	4			5				4	8

Participant 2	Session								
	B/L	2	3	4	5	6	7	8	Fu
Process-Based									
RoC scale	54.55	48.18			56.36		48.18	50	48.18
AAQ-II	49	49			47		48	49	48
CBP-Q	79	78			84		96	87	73
FFMQ	37	33			37		34	35	45
Symptom Based									
GAD	21	21			21		21	21	21
Depression	27							27	27
PTSD	65							73	76
Panic	15							15	18
OCD	69							71	66
Phobia	80							84	102
Hallucination (symptoms)	19							27	32
Hallucination (distress)	84							115	160
Hallucination (distract)	84							116	160
Hallucination (frequency)	80							117	160
Goal-Based									
Closeness	6	5			4		4	5	5
Usefulness of group		4			4		4	5	5
Satisfaction									
Living Situation	4							9	8
Amount support	8							9	8
Type support	8							9	8

Participant 3	Session								
	B/L	2	3	4	5	6	7	8	Fu
Process-Based									
RoC scale	70.91	68.18	61.82		55.45	54.45	55.45	65.45	77.27
AAQ-II	49	47	44		47	49	44	45	47
CBP-Q	78	83	90		90	80	85	84	72
FFMQ	28	33	33		34	30	34	33	39
Symptom Based									
GAD	13	15	14		19	18	12	14	10
PHQ-9	13				16			22	15
Panic	6				15			14	14
Goal-Based									
Closeness	2	8	3		7	3	4	6	7
Usefulness of group		9	8		8	7	8	8	9
Satisfaction									
Living Situation	9							8	9
Amount support	8							9	8
Type support	8							9	8

Participant 4	Session								
	B/L	2	3	4	5	6	7	8	Fu
Process-Based									
RoC scale	52.73		77.27		78.18	80	88.18	80	78.18
AAQ-II	33		32		31	28	28	28	29
CBP-Q	98		67		75	63	66	52	48
FFMQ	40		49		45	43	47	45	47
Symptom Based									
GAD	20		21		17	19	14	15	7
PHQ-9	20				20			15	8
Panic	10				12			7	0
Goal-Based									
Closeness	2		2		4	6	7	8	9
Usefulness of group					5	7	8	8	9
Satisfaction									
Living Situation	8							8	9
Amount support	8							8	9
Type support	3							8	7

Participant 5	Session								
	B/L	2	3	4	5	6	7	8	Fu
Process-Based									
RoC scale	68.18			73.64			76.36	71.82	
AAQ-II	33			35			35	28	
CBP-Q	77			88			89	64	
FFMQ	43			41			46	44	
Symptom Based									
Depression	11			11			13	8	
GAD	3			7				3	
Goal-Based									
Closeness	4			5			6	6	
Usefulness of group				8			8	8	
Satisfaction									
Living Situation	8			7				8	
Amount support	7			7				8	
Type support	8			8				8	

Participant 6	Session								
	B/L	2	3	4	5	6	7	8	Fu
Process-Based									
RoC scale	69.09	66.36	80			84.55		89.09	90
AAQ-II	38	39	37			30		29	28
CBP-Q	81	75	78			64		44	50
FFMQ	33	39	41					50	53
Symptom Based									
GAD	16	11	10			7		5	6
PTSD	69							33	34
Agoraphobia (Acc)	3.08							3	2.96
Agoraphobia (Alone)	3.54							3.42	3.58
Goal-Based									
Closeness	3	3	5			5		5	6
Usefulness of group		5	6			5		6	7
Satisfaction									
Living Situation	10							9	9
Amount support	3							3	4
Type support	1							3	2